CZECH REPUBLIC: ANALYSIS OF FINANCIAL PERFORMANCE INDICATORS

FINAL REPORT

Prepared for

East European Regional Housing Sector Assistance Project
Project 180-0034
U.S. Agency for International Development, ENI/EEUD/UDH
Contract No. EPE-C-00-95-001100-00, RFS No. 403

Prepared by

The Urban Institute
Francis Conway
Clare Romanik

and

Urban Research
Zdena Matousková

October 1997
UI Project 06610-403

THE URBAN INSTITUTE
2100 M Street, NW
Washington, DC 20037
(202) 833-7200
www.urban.org

TABLE OF CONTENTS

FOREWORD

This Analysis of the Financial Performance Indicators was developed as part of the Municipal Finance Program of the United States Agency for International Development in the Czech Republic in a joint activity with the Ministry of Finance. The document describes in preliminary terms a methodology that the Ministry of Finance or other interested organizations in the Czech Republic can use to characterize the financial condition and debt position of Czech municipalities by using financial performance indicators. The document also provides an example of applying that methodology in analyzing three groups of small municipalities in the District of Znojmo.

USAID assistance in the Czech Republic has supported the emerging municipal credit finance system by working with the Ministry of Finance, the Czech Union of Towns and Communities, Parliament and other national ministries responsible for setting overall policies, private commercial banks interested in lending to municipalities and with the municipalities seeking financing for priority investment projects. The assistance has included a Housing Guaranty (HG) loan and short-term technical assistance.

The technical assistance provided directly to a number of Czech municipalities has focused on assisting them in securing credit financing for priority infrastructure projects. In the process USAID has sought to develop replicable successful models of capital planning, infrastructure investment and debt management that can be shared with other Czech municipalities.

This methodology and its application to the District of Znojmo were developed under contract with USAID by the Urban Institute of Washington, D.C. and Urban Research of Prague.

EXECUTIVE SUMMARY

BACKGROUND

In 1996 as part of the Municipal Finance Program of the United States Agency for International Development in the Czech Republic, USAID consultants collaborated with the Union of Towns and Communities to develop a methodology that would allow Czech municipalities to assess their debt carrying capacity and to manage their existing debt burden by using financial performance indicators. USAID and the UTC published this methodology in a Municipal Credit Finance Handbook that was distributed widely beginning in September 1996.

Municipalities in the Czech Republic have been unable to take full advantage of the methodology described in the Municipal Credit Finance Handbook. The difficulty has been the lack of access to comparative indicators based on several years of data from a broad profile of Czech municipalities. Information in the data base maintained by the Ministry of Finance makes it possible to develop a comparative analysis of all municipalities or of particular subgroups of municipalities over time or with each other. Municipalities thus would be in a better position to assess their own financial condition and, thereby, to manage their financial resources more effectively. The Union of Towns and Communities has expressed great interest in the product of such an analysis using the data base available to the Ministry of Finance.

The Ministry of Finance agreed in April 1997 to participate in a test of the proposed methodology using data from 1995 and 1996 for the single district of Znojmo. To maintain the confidentiality of the data for individual municipalities, the Ministry indicated that it would calculate the indicators for the Znojmo District. It would make available to the USAID consultants a new data base of only those indicators, which would serve as a test case of the application of the methodology.

This document describes the result of that initial test. The document is organized in two parts:

- Part I describes the methodology employed in the analysis. It discusses the lessons learned in the application of the methodology to 126 municipalities in the District of Znojmo.

- Part II is the analysis of the actual indicators developed for three groups of small municipalities in the District of Znojmo. It provides an example of the type of report that might be used to disseminate the indicators for all the municipalities in the Czech Republic or for particular subgroups of municipalities.

Part I should be read in conjunction with Part II. Part II has been designed so that it could be distributed and used by itself.

SUMMARY OF THE METHODOLOGY AND PRELIMINARY TEST RESULTS

There are three parts to the methodology: preparing the data, checking the data and analyzing the data.

Preparation of the data is largely a tedious but relatively simple process of converting the financial information of a municipality into ratios or percents obtained by dividing one set of financial data by another, or by the number of inhabitants in the community. For example, an indicator can express net operating results[1] as a percent of recurring revenues. Per capita indicators are converted to real terms (in this case, 1991 Czech crowns) to make comparisons among expenditures and revenues in different years.

Checking the data involves identifying invalid values, testing the data for internal consistency, and identifying outliers. After verifying that invalid values are not due to data entry errors, cities with invalid data should be excluded from the analysis.

Analysis of the data involves six steps:

- Determining the universe for analysis, based on population groups or other variables
- Analyzing the central tendency and distribution of the data
- Creating a statistical definition of strong and weak financial performance
- Comparing “strong” and “weak” municipalities
- Determining the correlation between the net operating results of these two groups and other key indicators
- Evaluating existing benchmarks.

The District of Znojmo has 142 municipalities with a population of 2,000 inhabitants or fewer and only five municipalities with a population of more than 2,000 inhabitants. With so few larger municipalities in the sample, it was only possible to evaluate the financial condition and debt position of those municipalities with 2,000 inhabitants or fewer. The data checks revealed a few reporting errors on the part of the municipalities which reduced the number of municipalities from 142 to 126. This was still a large and valid sample which generated an interesting analysis, as described in Part II. The analysis showed, for example, that:

- All municipalities have an ample margin of total revenues over total expenditures. But, one out of every four municipalities in 1995 and one out of every five in 1996 had an operating deficit.

- Internal administration expenditures are the highest of those for any purpose. They also grew at a rate of over 20 percent from 1995 to 1996. The municipalities with the highest expenditures in this category were the most likely to have an operating deficit.

- The number of municipalities with long-term debt grew from 18 in 1995 to 31 in 1996 - one out of every four small municipalities in the sample.

- Of the municipalities that have borrowed, one out of every four may be having trouble meeting debt service payments from recurring revenues.

These results confirm the value of having access to comparative indicators for a group of municipalities of similar characteristics. The analysis paints a picture of a group of small municipalities that generally are in

[1] Net operating results refer to an operating surplus or deficit. Net operating results can be calculated as recurring revenues m ating expenditures or as operating expenditures divided by recurring revenues. In the former case, a negative value indicates an opera cit. In the latter case, a value greater than one indicates an operating deficit.

solid financial condition. It identifies some warning signals, particularly in the area of operating deficits. Individual small municipalities in Znojmo would benefit from access to the analysis of the indicators. It would provide them with a valuable basis on which to compare and evaluate their performance with that of their peers.

Unfortunately, the Znojmo data also limited the scope of the test of the methodology. Since the financial characteristics of small municipalities are very different than those of larger municipalities, it is virtually certain that the results of the Znojmo analysis have no bearing on other larger municipalities. At most, they may be applicable to other small municipalities in the country. In addition, the data for the small municipalities turned out to be highly variable. That is, there were great differences in the values of the indicators for the 126 municipalities. These two factors - the limited relevance of the sample to other Czech municipalities and the high degree of variation in the values - made it impossible to begin to develop and test benchmarks that might provide a standard of performance for all municipalities in the country.

SUGGESTIONS FOR FUTURE ANALYSIS

The most important next step is to apply the methodology described in this document to larger municipalities in the Czech Republic. There are 132 municipalities with more than 10,000 inhabitants and roughly twice that many with 5,000 or more inhabitants. This should show the value of using indicators to analyze the financial condition and debt position much more clearly than has been possible with the limited sample of smaller municipalities in the Znojmo District.

The new test should be structured somewhat differently:

- The test should include three years of data to have a better understanding of the trends. There is no way to determine whether a change from just one year to another signifies a trend. For example, a municipality with an operating deficit in just one of two years, may simply have had a bad year that is not part of a longer-term pattern. A municipality with an operating deficit in any two of three years potentially has a structural problem.

- The data sample should include sufficient municipalities of different population sizes to permit comparisons across size categories. The Znojmo test showed that there are structural differences between the smallest municipalities and all those with more than 2,000 inhabitants. Knowing more about other distinctions between size categories will improve the interpretation of indicators.

- The data sample also should include sufficient municipalities from different regions to permit comparisons across regions for the same reasons outlined above.

An alternative might be to extend the analysis to all municipalities in the Czech Republic. This would allow the fullest analysis of indicators and benchmarks. It also would permit a wide variety of cross category comparisons by size and region.

Finally, it is important to begin to test the relevance and usefulness of the outcome of the analysis with potential clients. There are many ways to present the results. The format used in Part II is similar to that used in indicator reports developed for the association of city managers (International City-County Managers Association) and financial officers (Government Finance Officers Association) in the United States. This may not necessarily be the best way to present the data in the Czech Republic. At a minimum, it would be valuable to organize a workshop to review the analysis and the format and content of Part II with a variety of staff within the Ministry of Finance and with the UTC. It would be even more desirable to include other potential clients, such as the banks active in municipal lending.

PART I: METHODOLOGY

INTRODUCTION

The Ministry of Finance maintains a computerized data base on the financial results of all municipalities in the Czech Republic. This document describes a methodology to utilize that data base to analyze the financial condition and debt position of particular subgroups of municipalities using financial performance indicators.

Indicators express the financial information of a municipality as a ratio or percent, obtained by dividing one set of financial data by another. For example, an indicator can express net operating results as a percent of recurring revenues. As such, indicators are a useful tool for comparing the financial information of one municipality over several years. Indicators also make it possible to compare the performance of one municipality with that of another. It is this ability to provide a comparison of results over time or among municipalities that makes performance indicators so valuable as a financial analysis tool.

The indicators used in the analysis fall into seven groups:

- Revenues
- Expenditures
- Net Results
- Actual to Original Budget[2] Performance
- Relative Growth
- Outstanding Debt and Debt Service
- Operating Expenditures by Purpose

These sets of indicators are included in the Municipal Credit Finance Handbook that was developed in 1996 as part of USAID's Municipal Finance Program in the Czech Republic in a joint activity with the members of the Finance Committee of the Union of Towns and Communities. The Handbook provides a methodology for Czech municipalities to assess their debt carrying capacity by using financial performance indicators. The Handbook also shows how to use a related computer model to apply the methodology to a specific municipality.

The difficulty to date in using indicators to analyze the financial condition and debt position of municipalities in the Czech Republic has been the lack of comparative historical data. Initial applications of the methodology have relied on data from a small group of municipalities. Another limitation has been the absence of adequate benchmarks. A benchmark is a target of performance which is used to interpret indicators. It helps determine whether the particular value of an indicator in a specific municipality shows strong or weak performance, and is based typically on an industry standard or in absence of a standard, on proven historical trends or comparative data. In the Czech Republic, currently, there are no benchmarks based on several years of data and on a broad profile of Czech municipalities

Access to the data base maintained by the Ministry of Finance creates an opportunity to address these shortcomings. With information from all municipalities it will be possible to develop a comparative analysis of the universe of municipalities or of particular subgroups. These subgroups, for example, could be selected based on the size of a municipality, its regional location or any other variable or combination of variables. The data base also provides an opportunity to begin to develop benchmarks specific to the reality of municipalities in the Czech Republic. Municipalities thus would be in a better position to assess their own financial condition and, thereby, to manage their financial resources more effectively. The Union of Towns and Communities has expressed great interest in the product of such an analysis using the data base available to the Ministry of Finance.

The Ministry of Finance agreed in April 1997 to participate in a test of the proposed methodology using

[2] In other countries, this might be referred to as a planned budget. We use the term original budget here to distinguish from final (revi gets that Czech municipalities create.

municipal data of the single district of Znojmo.[3] To maintain the confidentiality of the data for individual municipalities the Ministry indicated that it would calculate the indicators for the Znojmo District for 1995 and 1996. It would make available to the USAID consultants a new data base of only those indicators, which would serve as a test case of the application of the methodology.

STRUCTURE OF THE METHODOLOGY

There are three parts to the methodology: preparing the data, checking the data and analyzing the data. In the discussion of the methodology in the subsequent pages of this document, each page is split in half with a general explanation of the methodology to the left and lessons learned from the Znojmo data set to the right. Instructions for preparing the data are briefly described in this chapter and explained in detail in Annex I.[4] Per capita indicators are converted to real terms (in this case, 1991 Czech crowns) to make comparisons among expenditures and revenues in different years. This is not necessary for the ratio indicators because the process of dividing one financial value by another already standardizes the data.

Checking the data involves identifying invalid values, testing the data for internal consistency, and identifying outliers (extreme values). With the exception of indicators measuring operating surplus (deficit), negative values are invalid. For many of the ratio indicators, zero values are invalid or values greater than one are invalid. The table in Annex II lists which values are invalid overall and which values are invalid for purposes of analysis. After verifying that invalid values are not due to data entry errors, cities with invalid data (overall) should be excluded from the analysis.

Because much of the data are related to one another, it is possible to perform several data checks for internal consistency. These checks will either confirm the accuracy of the data preparation methodology or cause the analyst to question the methodology. Finally, the analyst will use a combination of statistical tools and knowledge of the financial workings of municipalities to identify outliers. Outliers differ from invalid values in that they are theoretically possible values, even though they are improbable. It is the analyst's discretion whether or not to exclude outliers.

Analysis of the data involves six steps:

- Determining the universe for analysis, based on population groups or other variables
- Analyzing the central tendency and distribution of the data
- Creating a statistical definition of strong and weak financial performance
- Comparing "strong" and "weak" municipalities
- Determining the correlation between the net operating results of these two groups and other key indicators
- Evaluating existing benchmarks.

After describing the analysis, suggestions are made for future data calculation and analysis.

HOW TO USE THE METHODOLOGY

[3] The Znojmo District is one of 77 districts which together comprise all the territory of the Czech Republic. The Znojmo District is the est in the Czech Republic, occupying 164 thousand hectares.

[4] Sometimes we refer to indicators by their abbreviated variable names. Readers should refer to Annex I for the corresponding ator name.

The methodology is presented in a way that assumes that the reader is someone experienced in data analysis. Several steps of the methodology require subjective judgements, which makes it necessary for the person (or team) who is to undertake further analysis to be familiar with Czech municipal finances and data analysis. It is hoped that staff from the MOF would be interested in applying this methodology to country-wide data and incorporating the suggestions for future analysis given at the end of this section.

STEP 1: PREPARATION OF THE DATA

Preparation of the data includes calculating the standard data set and the ratio and per capita indicators and assigning a unique identifier and population code to each municipality. A detailed explanation of all calculations is found in Annex I.

There are three data sources used for calculating the standard data set: The data source for most calculations is the Statement on Budget Performance of Municipalities and District Offices known as Form 1-12. The second source is the balance sheet of budgetary and contributory organizations, Form ROPO 3-02. The third source is the survey of assets and liabilities for communities with less than 3000 inhabitants, known as Form 6-01.

The standard data set and the ratio and per capita indicators should be calculated for the three most recent years for which the data are final. Nominal per capita indicators are calculated by dividing the data item by the population. To achieve comparable data, all per capita indicators shall be converted to 1991 Czech crowns. The conversion factor for 1994 is 1.47, for 1995 is 1.61 and for 1996 is 1.75. Divide the per capita data by the appropriate conversion factor to create per capita indicators in real terms.

Each city receives a unique identifier (number) which will be used for clarifying questions with the data. For the purposes of analysis, cities will also be assigned a population code according to nine population categories given in a table at the end of Annex I.

Znojmo

The calculation of the standard data set and the financial indicators was adapted from the Municipal Credit Finance Model. There are two data items that required municipalities to input an *ad hoc* calculation because they are not listed separately in the Form 1-12. These items are Investments Portion Grouping of Items 24 and Investments Portion Total State Subsidies (Item 7101).

In the case of the Znojmo data, the alternative for the *ad hoc* calculation was to assume that there was no investment portion of total state subsidies. That is, that all state subsidies were operating subsidies. We then included all the Grouping of Items 24 (Form 1-12, line 152) except for Total State Subsidies (Form 1-12, line 142) in our calculation of non-recurring revenues. This is not ideal, but it is a reasonable solution to the problem.

Other problems with data calculation will likely surface in the future because of changes to the Form 1-12 for 1997. These changes will make it more difficult to track financing activity because municipalities will only report the net result of this activity. This means that the financial records of a municipality that has not borrowed at all will look the same as those of a municipality with large debts, as long as loan revenues are equal to loan payments. New rules will also not require the reporting of operating expenditures by chapter which will make it difficult to track and compare expenditures.

STEP 2: DATA CHECKS

I. Identify invalid values. Recode ratio indicators that have values which cannot be interpreted for analysis. Exclude cities with invalid values.

A. Identify invalid values	**Znojmo**

Continued.

I. Identify invalid values, Recode ratio indicators that have values which cannot be interpreted for analysis, Exclude cities with invalid values. (Continued)

B. Pecado (continued)	**Znojmo**

II. Use mathematical tests to check internal consistency

Mathematical tests Use mathematical tests to check the data for internal consistency of ratio indicators. For example, total expenditures equal the sum of operating expenditures and capital investments. Thus: $\frac{\text{oper expenditures (A23)}}{\text{total expenditures}} + \frac{\text{capital investments (A24)}}{\text{total expenditures}} = 1$ For some categories of ratio indicators, such as Actual to Original Budget Performance Indicators and Indicators of Liquidity and Outstanding Debt, there are no mathematical tests. A.1 Key Revenue Indicators a12 + a13 + a14 = 1 a11 + a15 <= 1 A.2 Key expenditure Indicators a23 = a22 / a21 a23 + a24 = 1 a25 + a26 + a27 = 1 B.1 Key Indicators of Net Results b11 = (a11 * b12) * 1/a23 $\frac{\text{tot exp}}{\text{tot rev}} = \frac{\text{rec rev}}{\text{tot rev}} * \frac{\text{oper exp}}{\text{rec rev}} * \frac{\text{tot exp}}{\text{oper exp}}$ if b12 > 1 (oper deficit), then b13 and b14 should be negative. if b12 < 1 (oper surplus), then b13 and b14 should be positive. B.3 Key Relative Growth Indicators b31 = a11_1996 / a11_1995 b32 = b12_1996 / b12 1995 b33 = a27_1996 / a27_1995 C.2 Key Debt Service Indicators c21 > c22 D.1 Operating Expenditure Indicators by Purpose $\sum$ operating expenditures by purpose + debt service per capita = a22	**Znojmo** For the Znojmo data set, these mathematical tests helped confirm the validity of the data and, in one case, helped identify an error in the methodology of calculating the data. By checking the sum of operating expenditures by purpose per capita with the indicator for operating expenditures per capita, we were able to identify a typographical mistake in the methodology of calculating the data.

III. Identify outliers

Identify outliers

Identifying outliers is the most subjective part of checking the data. There is no clear definition of an outlier. An outlier is a value which is theoretically possible, but improbable. For example, a negative value for local revenues as a share of recurring revenues is theoretically impossible, thus an invalid value. A value of 2% is theoretically possible, but improbable. It is the analyst's discretion whether or not to exclude outliers.

One way to identify outliers is to identify extreme values. These usually are the values between the 0 and 5th percentile and the 95th and 100th percentile. Is there a large jump from the 75th to the 95th percentile? Is there a large jump from the 95th to the 100th percentile?

Znojmo

We have listed below some examples of outliers in the Znojmo data set. Because this is the first analysis of cross-sectional municipal financial data in the Czech Republic, these values were not eliminated from the data set. Another consideration was the size of cities in the data set. While these values may be improbable for medium-sized or large cities (of which more is known), they may be more common for small cities.

Ratio Indicators	Improbable Minimums	Improbable Maximums
Recurring Revenues / Total Revenues	14%	92%
National Tax Revenues / Recurring Revenues	12%	97%
Local Revenues / Recurring Revenues	2%	86%
Proceeds from Asset Sales / Total Revenues		42%
Operating Expenditures / Total Expenditures	12%	
Total Expenditures / Total Revenues	12%	
Operating Expenditures / Recurring Revenues	21%	281%
Actual Capital Investment Expenditures / Original Budget for Capital Expenditures		1,998%
Annual Debt Service / Operating Surplus Before Debt Service		562%

Per Capita Indicators (1991 Czech crowns)	
Non-recurring revenues per capita	21,760
Total Expenditures per capita	26,810
Operating Surplus per capita	6,440
Long-term Debt per capita	8,980
Agriculture Operating Expenditures per capita	4,520
Education Operating Expenditures per capita	2,250
Culture Operating Expenditures per capita	3,260
Internal Administration Operating Expenditures per capita	5,230
Labor and Social Operating Expenditures per capita	3,560

	*Construction Operating Expenditures per capita*2,680

STEP 3: ANALYSIS OF THE DATA

I. Determine the universe for analysis, based on population groups.

The objective is to analyze the financial performance of cities of similar size. For this reason, the cities were coded according to the following population categories:

Population Categories
1 (1 to 500 inhabitants)
2 (501 to 1000 inhabitants)
3 (1001 to 2000 inhabitants)
4 (2001 to 5000 inhabitants)
5 (5001 to 10000 inhabitants)
6 (10001 to 20000 inhabitants)
7 (20001 to 50000 inhabitants)
8 (50001 to 100,000 inhabitants)
9 (greater than 100,000 inhabitants)

Perform the following steps for individual population categories.

If there is a sufficient number of cities (about ten) in each of several population categories, then it is appropriate to compare the financial performance among different-sized cities. This should be done only after analyzing the financial performance of cities within the same population category.

Znojmo
The initial Znojmo data set had 147 municipalities. After excluding sixteen cities with invalid data, there were a total of 131 cities (five of which were not used in the analysis because they had population greater than 2000), with the following breakdown by population:

Population group	**Number of Cities before data check**	**after data check**
1	101	89
2	27	24
3	14	13
4	3	3
5	1	1
6	0	0
7	1	1
8	0	0
9	0	0
Total	**147**	**131**

We selected municipalities from population groups 1 to 3 for all future steps because they were the only population groups with a sufficient number of municipalities to perform analysis.

II. Analyze central tendency and distribution of the data

To understand the central tendency and distribution of the data, calculate the mean, median and the following percentiles for all ratio and per capita indicators:

minimum value
5th percentile
25th percentile
median (50th percentile)
75th percentile
95th percentile
maximum value

mean value

As mentioned in the section on checking the data, the minimum and maximum values often represent outliers in the data set. Mean values will be influenced by outliers, so it is useful also to know the median value to understand the indicator's central tendency. The 5th and 95th percentiles are useful for describing the range of most of the data, and generally exclude outliers. Half of the data lie between the 25th and 75th percentiles.

When there will be data for larger cities, it will be interesting to compare the distribution of the indicators for different-sized cities.

Znojmo
As an example, we have presented here the percentiles and mean for the three smallest population groups of municipalities combined from the Znojmo data set.

Recurring Revenues / Total Revenues:

	1995	**1996**
minimum	19%	14%
5th	27%	28%
25th	36%	39%
median	45%	52%
75th	59%	66%
95th	77%	80%
maximum	89%	92%
mean	49%	53%

For the Znojmo data set, the distribution of most indicators was more varied than we expected. It is possible that small cities by nature have more varied data. This can only be checked when there are more data from other regions.

A table with distributions for all indicators is found in Annex I of Part 2 (Znojmo report).

III. Create a statistical definition of strong and weak financial performance

The definition of strong and weak financial performance should be based on the data as well as experience from other countries on what constitutes good financial performance. This measure will primarily be based on a city's record of operating surpluses or deficits. It may be appropriate to take into account the size of the cities' total surplus as well. (Note that Czech law in effect for the years covered in this analysis forbid cities to have total deficits, which prompted us to exclude cities with data showing a total deficit from our analysis. Thus, total deficits could not be used as a definition of weak financial performance.) Options for financial performance measures which were explored: **strong** operating surplus of 10% or more; **average** operating surplus or deficit of less than 10% **weak** operating deficit of 10% or more This measure was calculated separately based on 1995 data and 1996 data.	**Znojmo** After analyzing the distribution of operating surpluses and deficits in our Znojmo data set, we chose 10% to represent a large surplus (operating or overall surplus). We should note that it was difficult to create a measure of weak financial performance because there was a small number of cities with weak financial performance. There also were many cities with surprisingly large operating surpluses and total surpluses, as a percent of expenditures. (This could easily be explained by the small cities, having fewer than 2000 inhabitants.) Our measure of financial performance in Znojmo: **strong** two years of large operating surpluses (at least 10%), and two years of large overall surpluses (at least 10%); **weak** two years of operating deficits

IV. Compare strong and weak cities

To compare the financial behavior and characteristics of strong and weak cities, calculate quartile values for all ratio and per capita indicators for the cities with a strong financial performance, as defined in the prior step. Do the same for the cities with a weak financial performance.

Do cities in the weak group have a different distribution than cities in the strong group? Do both the strong group and weak group differ from all cities evaluated together? It is likely that large differences will be noticeable for some indicators, while other indicators may not vary much across groups.

This analysis helps further describe the strong and weak cities. What are the common characteristics and financial conditions of strong and weak cities?

Znojmo

Recurring Revenues / Total Revenues (1995)

	Strong group	**All cities**	**Weak group**
minimum	26%	19%	27%
25th	39%	36%	33%
median	49%	45%	40%
75th	61%	59%	52%
maximum	86%	89%	89%

In the example shown, we see that for the 25th, 50th and 75th percentiles, the strong group has the highest share of recurring revenues. All cities evaluated together fall in the middle and the weak group has the lowest share of recurring revenues.

Tables with the indicator distributions of the strong group and weak group are found in Annex II of Part II (Znojmo report).

V. Run correlations between net operating results and other key indicators

A higher correlation shows a stronger relationship between two indicators. A low correlation implies that a relationship does not exist.

What indicators are associated with an operating deficit?

We cannot conclude from correlations that there is a causal relationship, i.e. between a particular financial condition (as measured by an indicator) and an operating deficit. Rather, correlations serve as an important step in building a model to explain the causes of poor financial performance, which can be tested with multi-variate regression analysis.

Znojmo

	Total Expenditures / Total Revenues 1996	Operating Expend. / Recurring Rev. 1996
1. Actual Total Revenues / Budgeted Total Revenues	.2028*	.0849
2. Actual Recurring Revenues / Budgeted Recurring Revenues	-.0157	-.2548*
3. Actual Total Expenditures / Budgeted Total Expenditures	.5948*	.1659
4. Actual Operating Expenditures / Budgeted Operating Expenditures	.2153*	.3693*
5. Actual Capital Investments / Budgeted Capital Investments	.3937*	.0839

* Significant at the .05 level.

The above example shows positive and significant correlations between total expenditures divided by total revenues and (1), (3), (4) and (5). This implies that a smaller total surplus (a higher value, closer to one, for total expenditures / total revenues) is associated with underestimating the budget for total revenues, total expenditures, operating expenditures and capital expenditures. (The greater the value of the above indicators 1-5, the more the original budget underestimated actual spending or revenues for the year.) The strongest correlation by far is with underestimating the budget for total expenditures.

Operating expenditures divided by recurring revenues have a positive and significant correlation with (4) and a negative and significant correlation with (2). This implies that an operating deficit (a value greater than one for operating expenditures / recurring revenues) is associated with underestimating the budget for operating expenditures and as well as with overestimating the budget for recurring revenues.

VI. Evaluate existing benchmarks

Calculate categorical variables based on existing benchmarks for all ratio indicators with benchmarks. Calculate the frequency of each category (strong, average, weak).

When there will be data from other districts and data from larger cities, this analysis will help decide whether the existing benchmarks should be modified.

The first question will be: "What is the distribution of status according to the existing benchmarks?"

The second question will be: "Does this distribution fit with our understanding of strong and weak financial performance?" For example, what is the relationship between strong performers in terms of operating deficits and strong performers in terms of the benchmark for this indicator? Are there many cities with operating deficits which are classified as "average" by the existing benchmark?

Note: The term "average" used in indicating a municipality's status according to a particular benchmark has no statistical meaning. The term is used to convey that the municipality is neither strong nor weak according to that particular benchmark.

Znojmo
Distribution of status based on the existing benchmarks for Recurring Revenues / Total Revenues:

Population 1 - 500 (N = 89)

	1995	**1996**
strong > .66	12%	23%
average .50 - .66	24%	26%
weak < .50	64%	52%
Total	100%	100%

Population 501 - 1000 (N = 24)

	1995	**1996**
strong > .66	29%	29%
average .50 - .66	21%	29%
weak < .50	50%	42%
Total	100%	100%

Population 1001 - 2000 (N = 13)

	1995	**1996**
strong > .66	31%	31%
average .50 - .66	31%	39%
weak < .50	39%	31%
Total	100%	100%

Having data from only one district was not sufficient for evaluating and modifying the existing benchmarks. However, the results above suggest that financial indicators, and thus the appropriate benchmarks, will vary by population of the municipality.

A table with the distribution of status according to the existing benchmarks for all 126 cities together is found in Annex III and a table with the same information for the three population subgroups is found in Annex IV of Part II (Znojmo report).

ISSUES REGARDING MUNICIPAL FINANCIAL DATA

The data check performed as part of the analysis of the Znojmo District identified a number of cases of specific financial data with invalid values. To maintain the confidentiality of the data for individual municipalities the Ministry of Finance did not provide the actual financial data for the municipalities in the Znojmo District. Rather, the Ministry calculated the corresponding financial performance indicators and provided a subsidiary data base only with those values. The data check had to be done indirectly by testing for errors in the value of the indicators. For example, with the exception of indicators measuring operating surplus (deficit), negative values are invalid. For many of the ratio indicators, zero values are invalid or values greater than one are invalid. After verifying with the Ministry of Finance that invalid values were not due to data entry errors, sixteen municipalities with invalid data were excluded from the analysis. This is one out of every nine municipalities in Znojmo.

The data errors found in the Znojmo data fall into the following categories:

- Invalid data on the proceeds from the sale of municipal property - There were two types of data errors. In one case, the reported proceeds from property sales were greater than total revenues. In two other cases, the reported proceeds were negative.

- Negative expenditures - There were two types of data errors - In three cases, a municipality reported negative expenditures by chapter, specifically for transportation, culture and local economy. In another case, a municipality reported negative total capital expenditures. (As a result, in this municipality total operating expenditures were greater than total expenditures.)

- Total expenditures greater than total revenues - In 1995 and 1996 municipalities could not operate with an overall deficit for the year. Yet, there were nine such cases among the Znojmo municipalities.

Without access to the actual data, we can only infer the possible causes of these apparent data errors. The range of possibilities includes the following:

- **Data entry mistakes.** This is probably the best explanation for the one case in which a municipality reported proceeds from property sales that were greater than total revenues. With over 6,000 municipalities reporting tens of data elements, it would not be surprising if there were occasional data entry errors. There probably were many other data entry errors in the Znojmo data set that were not detected because, although wrong, the reported figure fell within the range of valid values.

- **Issues related to accounting practices.** The problem here could be either a misunderstanding of the accounting standards or a failure to follow those standards consistently. Experience in other municipalities, outside the Znojmo District, suggests that some municipalities use negative expenditure entries to correct or back out earlier incorrect entries. This is called a reclassification entry in accounting terms. This would be the case, for example, when a municipality decides that it has classified an expenditure in the wrong chapter. There would be a negative entry to cancel out the initial transaction and a corresponding positive entry in the correct chapter. The net is zero. There would be no negative expenditures unless the adjustment was made in the subsequent year. In this case, the reclassification adjustment should NOT be made in subsequent year, if proper accounting standards were followed. Rather, the adjustment should be directly to fund balance.

Improper use of a reclassification entry provides a plausible explanation for the three cases with negative per capita expenditures by chapter. A similar problem would occur if a municipality decided to reclassify a capital expenditure as an operating expenditure and used the same offsetting negative and positive entries to implement the change. This could happen easily with a repair or with maintenance work that might have been considered a capital expenditure initially. It is a plausible explanation for the one case in which a municipality reported negative total capital expenditures.

- **Issues related to accounting standards**. This is much more difficult to judge with the limited information available for the analysis of the Znojmo District. In explaining the reason why nine municipalities in Znojmo reported an overall deficit, the Ministry of Finance indicated that the municipalities might not have reported as revenue zero-interest loans they had received from the State Environmental Fund or from the MOF itself or one of its district offices. Apparently, such transactions might be reported as a credit item (Uc 1-12, 106) or as supplementary data (Uc 1-12 Part IV, 44-48). If the municipality does not report the revenue but reports the corresponding expenditure item, it could have a legitimate overall deficit. The issue at this point would not be the reported deficit, but rather the proper way to record these particular types of loans.

It may be that the municipality recorded the loan receipt on the balance sheet and did not record the source of the funds on the income statement. By not recording the source of funds on the income statement, a deficit would result. The accounting matching principal has not been met. A proper treatment of this transaction is to record the source of funds as an "Other Financing Source" on the income statement, thereby matching expenditures with its revenue source.

SUGGESTIONS FOR FUTURE DATA CALCULATION AND ANALYSIS

Finally, several useful lessons were learned from this initial application of the proposed methodology for using financial performance indicators to analyze the financial condition and debt position of particular subgroups of municipalities. They include the following:

- Calculate per capita financial indicators as well as ratio financial indicators. Interpretation of ratio indicators is more complicated because it requires understanding of what is happening in the numerator and in the denominator. Per capita indicators provide the additional information that is needed to do this. For example, we saw that recurring revenues as a share of total revenues were much smaller on average than expected for the Znojmo municipalities. By comparing the per capita indicators we could understand that while recurring revenues were somewhat smaller per capita in these small municipalities, the greater difference came from the quite large non-recurring revenues per capita. Since non-recurring revenues per capita were much larger in the small cities, they represented a larger share of total revenues.

- Include at least three years of data to have a better understanding of real trends. It is important to understand whether an increase in one year signifies a trend. Using three (or more) years of data will help identify trends and will smooth the data. Non-recurring revenues and capital investments by definition will greatly vary from year to year. Taking moving averages (i.e., the average value for the past three years) will prevent conclusions drawn from exceptional years. For example, if a municipality had one bad year financially, then a three-year average of its financial data will be somewhat, but not greatly affected by the bad year. Three years of bad financial conditions will be very obvious using this method.

- Compare the indicators and financial performance of municipalities with different populations. We have learned that structural differences in the finances of small and large municipalities will likely affect the indicators we use to measure financial performance. It will be important to take these structural differences into account in modifying the benchmarks and devising measures of strong and weak financial performance.

- Compare the financial performance of municipalities from different regions. As macroeconomic indicators such as unemployment and inflation vary by region, so too will the performance of municipalities. In trying to model the causes of strong and weak financial performance, it will be necessary to control for regional variation.

- Analyze the incidence of debt and the size of debt and debt service in the Czech Republic. Are the strong or weak cities taking on debt? At what level does debt service per capita become too great for a municipality to handle?

PART II: ANALYSIS OF THE ZNOJMO DISTRICT

INTRODUCTION

The Znojmo District is one of 77 districts which together comprise all the territory of the Czech Republic. The Znojmo District is the fifth largest in the Czech Republic, occupying 164 thousand hectares.

As of January 1, 1996 there are 147 municipalities in the Znojmo District, with 114 thousand inhabitants. Most of these municipalities (142 out of 147) have very small populations, 2000 inhabitants or fewer. A third of the District's population lives in the municipality of Znojmo, which gives the District its name. The structure of the Znojmo District is shown in Table 1.

Table 1
The Structure of Znojmo District as of 1995

Population Category	Number of Municipalities	Distribution of Municipalities	Number of Inhabitants	Distribution of Population
1 to 500	101	69%	26 499	23%
501 to 1000	27	18%	18 404	16%
1001 to 2000	14	10%	16 947	15%
2 001 to 5 000	3	2%	8 604	8%
5 001 to 10 000	1	1%	6 277	6%
10 001 to 20 000	0	0%	0	0%
20 001 to 50 000	1	1%	37 217	33%
50 001 to 100 000	0	0%	0	0%
100 001 or more	0	0%	0	0%
Total	147	100%	113 948	100%

This analysis focuses only on those municipalities in the District with 2,000 or fewer inhabitants.[5] **In order to test for differences among these smaller municipalities, they were subdivided into three groups by size, that is 1 to 500, 501 to 1000 and 1001 to 2000. The five municipalities in the district that are larger do not constitute a large enough group for a meaningful analysis.**

There are 142 municipalities in Znojmo with 2,000 or fewer inhabitants. Of these, sixteen municipalities have been exclu ause of uncertainty regarding the accuracy of their financial data. The analysis in this report covers only the remaining nicipalities.

STRUCTURE OF THE ANALYSIS

The analysis is organized into nine sections. Each of the first seven sections focuses on a distinct set of indicators that look at a particular aspect of the financial results of the municipalities. The two final sections address special issues that apply specifically to the municipalities in Znojmo.

The seven sets of indicators covered in the analysis are:

- Revenues
- Expenditures
- Net Results
- Actual to Original Budget[6] **Performance**
- **Relative Growth**
- **Outstanding Debt and Debt Service**
- **Operating Expenditures by Purpose**

These sets of indicators are included in the Municipal Credit Finance Handbook that was developed in 1996 as part of USAID's Municipal Finance Program in the Czech Republic in a joint activity with the members of the Finance Committee of the Union of Towns and Communities. The Handbook provides a method that Czech municipalities can use to assess their debt carrying capacity by using financial performance indicators. The Handbook also shows how to use a related computer model to apply the methodology to a specific municipality.

Indicators express the financial information of a municipality as a ratio or percent obtained by dividing one set of financial data by another. For example, an indicator can express net operating results as a percent of recurring revenues. As such, indicators are a useful tool for comparing the financial information of one municipality from more than one year. Indicators also make it possible to compare the results of one municipality with that of another. It is this ability to provide a comparison of results over time or among more than one municipality that makes performance indicators so valuable as a financial analysis tool.

The calculation of these indicators uses the basic data included in the standard municipal income and expense and balance sheet reports. It also requires information on the population of a municipality. The actual computation of each indicator is simple. In most cases it involves the division of one number by another. The Ministry of Finance performed the calculations necessary to develop the indicators for this report using the data provided annually by the municipalities for 1995 and 1996. The Ministry created a new data set containing only the indicators for each municipality. This analysis is based

In other countries this might be referred to as a planned budget. We use the term original budget here to distinguish from t ised) budgets that Czech municipalities create.

solely on that new data set. The staff who prepared the analysis did not have access at any time to the original financial data for this individual municipalities.

The section on each of the seven sets of indicators is organized in two parts. The first involves a written analysis of the indicators. It includes a description of the nature and purpose of the indicators. It also includes a discussion of what the indicators show about the municipalities in Znojmo. The second part of the section is a presentation in tabular form of the results of a statistical analysis of the values of the indicators recorded by the 126 municipalities included in the analysis. For each indicator, the tables show values in the 25th, 50th and 75th percentiles.[7]

The last two sections of the analysis address special issues that apply specifically to the municipalities in Znojmo. The first of these sections refers to the large absolute differences that exist in the values of the indicators recorded by the 126 small municipalities. The discussion describes the nature and extent of these variations and considers their implication for the analysis. The second of the two final sections of the analysis looks at the characteristics of two sub-groups of municipalities in Znojmo. One group includes those municipalities with the strongest financial performance. The other includes those with the weakest performance. The discussion attempts to identify patterns in the indicators in each group that might explain their strong and weak financial performance, respectively.

HOW TO USE THE RESULTS OF THE ANALYSIS

The results of this analysis of the financial performance indicators in the District of Znojmo are most useful to the 126 municipalities included in the analysis. At this time there is no way of knowing whether these municipalities are typical or not of the other municipalities of similar size in other districts in the Czech Republic. There also is no reason to believe that the indicators relevant for small municipalities in Znojmo are relevant to larger municipalities in that district or in any other district in the country.

Any small municipality in Znojmo can calculate its own indicators using the methodology described in the Municipal Credit Finance Handbook that was developed in 1996 by USAID for the UTC. An even easier method is to use the computer model developed as part of the Handbook. It is available from the USAID and the UTC.[8] **Once a municipality has**

25th percentile **- The value at which 25 percent of the municipalities had a lower value and 75 percent a higher value.** ***centile*** **- The value at which 50 percent of the municipalities had a lower value and 50 percent a higher value.** ***75th percentile*** **- e at which 75 percent of the municipalities had a lower value and 25 percent a higher value.**

The various steps of the credit finance analysis methodology require many calculations using extensive data taken from ncial results of a municipality. A related computer model, developed concurrently with the methodology, performs all the neces ulations. The computer model also prepares reports and graphs that can be used to view and present the results of the analy of the model does not require extensive knowledge of computers. On-screen input forms make it easy to enter all data umptions required to run the model as well as to view the results. A menu provides access to all operations, including data e ting and every step of the methodology.

calculated its own indicators, it can compare its performance with that of the 126 municipalities included in this analysis by referring to the discussion of the seven standard sets of indicators. The table included with each set of indicators allows a municipality to place its results in the distribution of values recorded by all the municipalities. The written discussion of each set of indicators provides guidance and suggestions to help a municipality interpret the meaning of the values of its own indicators.

A NOTE OF CAUTION

The indicators described in this report use quantitative methods to look at the financial situation of a municipality. The results of the analysis *do not and cannot* provide a simple mathematical answer to the difficult questions on the overall financial health of the municipality. In the end, those answers must depend on the judgement of the persons conducting the analysis. What the indicators *can do* is to present objective data on the financial condition of the municipality to assist them in the decision making process.

In using financial performance indicators it is very important to understand that they always have to be applied and interpreted in context. A local government following good management procedures may well deviate from "strong" benchmarks for good reasons. For example, it may well be good policy for a community to sell certain assets and re-deploy its funds elsewhere. The fact that this would increase the proportion of revenues raised from asset sales or decrease the ratio of recurring to total revenues, for example, does not mean that it is not a desirable thing to do. Similarly, a community may decide to take out a loan and increase its debt service in order to carry out high-priority investment. This does not mean that to do so is undesirable. It does mean that there is an element of risk inherent in these decisions that should be taken into account.

All of the per capita indicators in this report are given in constant 1991 Czech crowns. Data from 1995 were divided by the coefficient 1.61 to adjust for inflation from the years 1991 to 1995 and the data from 1996 were divided by the coefficient 1.75 to adjust for inflation from the years 1991 to 1996.

THIS PAGE INTENTIONALLY LEFT BLANK

ANALYSIS OF INDICATORS

■ Revenue indicators

What are the revenue indicators?
There are five revenue indicators:
- Recurring revenues/Total Revenues
- National Tax Revenues/Recurring Revenues
- State Operating Subsidies/Recurring Revenues
- Local Revenues/Recurring Revenues
- Proceeds from Asset Sales/Total Revenues

What are recurring and non-recurring revenues?
Recurring revenues are those that derive from an existing national law or municipal resolution that provide a continuing flow of resources for the municipality year after year. They include local revenues, shared national taxes and recurring state operating subsidies. Non-recurring revenues are those that are authorized only for a specific year and may or may not provide resources for the municipality in another year. They include all other revenues. *Appendix 1 of the Credit Finance Handbook provides a detailed explanation of the calculation of recurring revenues.*

What do the revenue indicators measure?
These indicators are designed to assist in understanding the structure of revenues in general and especially of recurring revenues. Which is the most important source of recurring revenues? To what extent does the municipality rely on revenues that it receives from the national government? What are the trends in per capita revenues?

Why are the revenue indicators important?
Of primary interest is whether revenues are growing and in what categories. Growth in recurring revenues will allow a municipality to increase the level of services to the community. Municipalities that are more dependent on shared national tax revenues and state subsidies confront the risk that those revenues might decrease as a result of decisions that are outside their control.

How significant are the revenue indicators in the District of Znojmo?
The indicators provide a useful picture of the structure of revenues in the District in 1995 and 1996.

What do the revenue indicators show in the District of Znojmo?
(1) Recurring versus Non-recurring revenues: In 1995, nearly 60 percent of the municipalities in Znojmo relied primarily on non-recurring revenues. The smaller the municipality, the higher the dependence on non-recurring revenues. The share of recurring revenues increased for most municipalities from 1995 to 1996.

(2) Recurring Revenues: Per capita indicators show that both national and local tax revenues grew in real terms between 1995 and 1996.

National tax revenues represent a growing share of recurring revenues in virtually all municipalities. This represents a growing element of risk for these municipalities.

(3) Non-recurring revenues: Municipalities with a population between 1001 and 2000 had a higher proportion of asset sales to total revenues than the smaller municipalities. In general though, asset sales are not a significant source of revenues. This is a positive

sign.

Revenue Indicators, Municipalities Population 1 - 500

Indicator and Year	25% of the municipalities had an equal or lower value	50% of the municipalities had a lower value and 50% a higher value	75% of the municipalities had an equal or lower value
Recurring Revenues/Total Revenues			
1995	36%	44%	57%
1996	38%	49%	63%
National Tax Revenues/Recurring Revenues			
1995	36%	49%	56%
1996	42%	49%	59%
Local Revenues/Recurring Revenues			
1995	42%	51%	60%
1996	39%	48%	57%
Proceeds from Asset Sales/Total Revenues			
1995	0%	0%	1%
1996	0%	0%	2%
Recurring Revenues per capita			
1995	1 690Kc	2 040Kc	2 470Kc
1996	2 120Kc	2 470Kc	3 190Kc
Non-recurring Revenues per capita			
1995	1 710Kc	2 480Kc	3 760Kc
1996	1 460Kc	2 620Kc	3 870Kc
National Tax Revenues per capita			
1995	800Kc	880Kc	1 000Kc
1996	1 080Kc	1 210Kc	1 320Kc
Local Revenues per capita			
1995	700Kc	960Kc	1 440Kc
1996	880Kc	1 110Kc	1 650Kc
Proceeds from Property Sales per capita			
1995	0Kc	0Kc	30Kc

1996	0Kc	0Kc	90Kc

Revenue Indicators, Municipalities Population 501 - 1000

Indicator and Year	25% of the municipalities had an equal or lower value	50% of the municipalities had a lower value and 50% a higher value	75% of the municipalities had an equal or lower value
Recurring Revenues/Total Revenues			
1995	32%	48%	69%
1996	41%	58%	67%
National Tax Revenues/Recurring Revenues			
1995	36%	42%	49%
1996	44%	52%	57%
Local Revenues/Recurring Revenues			
1995	45%	48%	52%
1996	38%	42%	46%
Proceeds from Asset Sales/Total Revenues			
1995	0%	0%	1%
1996	0%	0%	1%
Recurring Revenues per capita			
1995	1 920Kc	2 270Kc	2 620Kc
1996	2 190Kc	2 590Kc	2 960Kc
Non-recurring Revenues per capita			
1995	1 050Kc	2 020Kc	5 230Kc
1996	1 240Kc	2 400Kc	3 780Kc
National Tax Revenues per capita			
1995	830Kc	930Kc	1 010Kc
1996	1 150Kc	1 230Kc	1 320Kc
Local Revenues per capita			
1995	870Kc	1 090Kc	1 520Kc
1996	890Kc	1 060Kc	1 520Kc
Proceeds from Property Sales per capita			
1995	0Kc	20Kc	80Kc

1996	0Kc	10Kc	120Kc

Revenue Indicators, Municipalities Population 1001- 2000

Indicator and Year	25% of the municipalities had an equal or lower value	50% of the municipalities had a lower value and 50% a higher value	75% of the municipalities had an equal or lower value
Recurring Revenues/Total Revenues			
1995	43%	58%	67%
1996	43%	56%	69%
National Tax Revenues/Recurring Revenues			
1995	36%	41%	44%
1996	40%	45%	48%
Local Revenues/Recurring Revenues			
1995	46%	50%	56%
1996	47%	50%	52%
Proceeds from Asset Sales/Total Revenues			
1995	0%	1%	7%
1996	0%	1%	3%
Recurring Revenues per capita			
1995	2 350Kc	2 520Kc	2 680Kc
1996	2 650Kc	2 740Kc	2 870Kc
Non-recurring Revenues per capita			
1995	1 550Kc	2 140Kc	3 790Kc
1996	1 330Kc	2 330Kc	4 100Kc
National Tax Revenues per capita			
1995	920Kc	980Kc	1 140Kc
1996	1 140Kc	1 210Kc	1 460Kc
Local Revenues per capita			
1995	1 150Kc	1 260Kc	1 450Kc
1996	1 180Kc	1 360Kc	1 430Kc
Proceeds from Property Sales per capita			
1995	10Kc	60Kc	300Kc

1996	10Kc	70Kc	190Kc

■ Expenditure indicators

What are the expenditure indicators?
There are seven expenditure indicators:
- Total expenditures per capita
- Operating Expenditures per capita
- Operating Expenditures/Total Expenditures
- Capital Expenditures/Total Expenditures
- Expenditures of Budgetary Organizations/ Operating Expenditures
- Subsidies to Contributory Organizations/ Operating Expenditures
- Subsidies to Other Organizations/ Operating Expenditures

What are capital and operating expenditures?
Total expenditures already are disaggregated in the form Uč 1-12 into investment (capital) and non-investment expenditures (operating). These are the same categories used for the indicators.

What do the expenditure indicators measure?
These indicators look at the relative importance of operating versus capital investment expenditures. They also look at the behavior of expenditures relative to the size of the local population. Finally, they look at the nature of the organizations that actually incur the expenditures. Together they provide an understanding of the changing nature of the expenditures, of their growth and of the trends in the role of budgetary, contributory and other organizations.

Why are the expenditure indicators important?
Many indicators in this category are descriptive, that is, they do not help measure performance or levels of risk. Two important questions are whether expenditures are increasing from year to year and how the relative share of operating and capital expenditures is evolving. Another issue is the degree to which the municipality relies on contributory organizations to deliver services. The assumption is that there is less control over expenditures of such organizations and hence higher risk.

How significant are the expenditure indicators in the Znojmo District?
The indicators identify an important trend in the composition and level of expenditures. The indicators on subsidies to contributory and other organizations appear not to be applicable to this group of municipalities. Virtually all expenditures are carried out through budgetary organizations.

What do the expenditure indicators show in the District of Znojmo?
(1) Total Expenditures increased in most municipalities from1995 to1996 in real terms, that is, after discounting the effect of inflation.

(2) Operating expenditures in the smallest municipalities (1-500) increased most rapidly in real terms between 1995 and 1996.

(3) Capital expenditures in the smallest municipalities decreased significantly in real terms.

(4) Operating Expenditures as a share of Total Expenditures increased across the board. Operating expenditures represent the cost of services provided to the local community. The cost of these services is claiming a growing share of the total municipal budget in all size categories.

Expenditure Indicators, Municipalities Population 1- 500

Indicator and Year	25% of the municipalities had an equal or lower value	50% of the municipalities had a lower value and 50% a higher value	75% of the municipalities had an equal or lower value
Total Expenditures per capita			
1995	1 710Kc	2 670Kc	4 600Kc
1996	1 880Kc	2 890Kc	4 580Kc
Operating Expenditures per capita			
1995	1 070Kc	1 450Kc	2 230Kc
1996	1 170Kc	1 770Kc	2 600Kc
Capital Expenditures per capita			
1995	240Kc	820Kc	2 650Kc
1996	110Kc	600Kc	2 030Kc
Operating Expenditures / Total Expenditures			
1995	38%	68%	87%
1996	43%	77%	95%
Capital Investments / Total Expenditures			
1995	13%	32%	62%
1996	5%	23%	58%
Expenditures of Budgetary Organizations / Operating Expenditures			
1995	98%	100%	100%
1996	97%	99%	100%
Subsidies to Contributory Organizations / Operating Expenditures			
1995	0%	0%	2%
1996	0%	1%	3%
Subsidies to State Firms / Operating Expenditures			
1995	0%	0%	0%
1996	0%	0%	0%

Expenditure Indicators, Municipalities Population 501 - 1000

Indicator and Year	25% of the municipalities had an equal or lower value	50% of the municipalities had a lower value and 50% a higher value	75% of the municipalities had an equal or lower value
Total Expenditures per capita			
1995	2 920Kc	3 250Kc	5 320Kc
1996	2 610Kc	3 740Kc	6 770Kc
Operating Expenditures per capita			
1995	1 510Kc	1 900Kc	2 610Kc
1996	1 540Kc	2 050Kc	2 570Kc
Capital Expenditures per capita			
1995	590Kc	1 640Kc	3 080Kc
1996	690Kc	1 500Kc	3 450Kc
Operating Expenditures / Total Expenditures			
1995	37%	50%	80%
1996	37%	52%	77%
Capital Investments / Total Expenditures			
1995	21%	50%	64%
1996	23%	48%	63%
Expenditures of Budgetary Organizations / Operating Expenditures			
1995	99%	100%	100%
1996	95%	97%	99%
Subsidies to Contributory Organizations / Operating Expenditures			
1995	0%	0%	1%
1996	1%	3%	6%
Subsidies to State Firms / Operating Expenditures			
1995	0%	0%	0%
1996	0%	0%	0%

Expenditure Indicators, Municipalities Population 1001 - 2000

Indicator and Year	25% of the municipalities had an equal or lower value	50% of the municipalities had a lower value and 50% a higher value	75% of the municipalities had an equal or lower value
Total Expenditures per capita			
1995	3 270Kc	3 970Kc	7 350Kc
1996	3 500Kc	4 460Kc	7 280Kc
Operating Expenditures per capita			
1995	1 800Kc	1 900Kc	2 650Kc
1996	1 840Kc	2 040Kc	2 440Kc
Capital Expenditures per capita			
1995	1 380Kc	2 030Kc	4 920Kc
1996	1 060Kc	2 560Kc	3 630Kc
Operating Expenditures / Total Expenditures			
1995	33%	45%	57%
1996	36%	49%	69%
Capital Investments / Total Expenditures			
1995	43%	55%	67%
1996	31%	51%	64%
Expenditures of Budgetary Organizations / Operating Expenditures			
1995	99%	100%	100%
1996	97%	98%	100%
Subsidies to Contributory Organizations / Operating Expenditures			
1995	0%	0%	1%
1996	0%	2%	3%
Subsidies to State Firms / Operating Expenditures			
1995	0%	0%	0%
1996	0%	0%	0%

■ Indicators of net results

What are the indicators of net results?
There are four indicators of net results:
- Total Expenditures/Total Revenues
- Operating Expenditures/Recurring Revenues
- Operating Surplus/National Tax Revenues
- Operating Surplus/State Operating Subsidies

What is the operating surplus?
The operating surplus of a municipality is the difference between recurring revenues and non-investment (or operating) expenditures. An operating surplus occurs when recurring revenues are greater than operating expenditures. This is an important aspect of municipal finances that is not calculated currently. For example, the operating surplus is the amount available to pay the maturing principal and interest payments on new long-term debt. As such, it helps to determine the maximum amount a municipality *can* borrow.

What do the indicators of net results measure?
These are among the most basic indicators. They look at the extent to which a municipality is spending more than it receives in revenues. These indicators also help provide an understanding of the trends in net operating results and of the degree to which they depend on the different sources of recurring revenues.

Why are the indicators of net results important?
The surplus of revenues over expenditures is the amount available to fund new expenditures including new debt service. A municipality that has a current net operating deficit has no free recurring revenues available to fund additional expenditures or debt service. It should take steps either to increase recurring revenues or to decrease non-investment (or operating) expenditures. It should not consider entering into any new loans until it has taken steps to identify and address the causes of the problem.

How significant are the indicators of net results in the Znojmo District?
The indicators provide valuable insights to the overall financial condition of the municipalities.

What do the indicators of net results show in the Znojmo District?
(1) Total surplus (deficit): In all municipalities total revenues exceed total expenditures. This is a positive sign.

(2) Operating surplus (deficit): In 1995 about one out of every four municipalities had an operating deficit. The figure was one in five in 1996. One in ten municipalities had an operating deficit two years in a row.

The municipalities covered the operating deficit with non-recurring revenues, so that overall they had a positive balance of total revenues over total expenditures, as noted above.

Although the municipalities have succeeded in addressing the problem for the moment, the operating deficits are a sign of a structural weakness that should be corrected.

The problem is most serious in the municipalities with 1000 or fewer inhabitants. This is discussed in more detail in the final section of this report which looks at the strong and weak municipalities.

Indicators of Net Results, Municipalities Population 1 - 500

Indicator and Year	25% of the municipalities had an equal or lower value	50% of the municipalities had a lower value and 50% a higher value	75% of the municipalities had an equal or lower value
Total Expenditures / Total Revenues			
1995	48%	72%	83%
1996	43%	63%	81%
Operating Expenditures / Recurring Revenues			
1995	56%	73%	100%
1996	54%	71%	97%
Operating Surplus / National Tax Revenues [a]			
1995	41%	73%	107%
1996	44%	64%	102%
Operating Surplus / State Operating Subsidies [a]			
1995	837%	3278%	13196%
1996	1193%	3422%	16467%
Overall Surplus per capita			
1995	730Kc	1 400Kc	2 350Kc
1996	1070Kc	1 660Kc	2 810Kc
Operating Surplus per capita			
1995	(130)Kc[b]	510Kc	880Kc
1996	(30)Kc[b]	710Kc	1 090Kc

Notes:
[a] Sample size equals 66 (1995) and 69 (1996) - Excludes cases with operating deficit.
[b] The value in this case for both 1995 and 1996 is for the 20th percentile, that is, 20 percent of municipalities had a value equal to or lower than the figure shown in the table.

Indicators of Net Results, Municipalities Population 501 - 1000

Indicator and Year	25% of the municipalities had an equal or lower value	50% of the municipalities had a lower value and 50% a higher value	75% of the municipalities had an equal or lower value
Total Expenditures / Total Revenues			
1995	74%	85%	91%
1996	73%	80%	90%
Operating Expenditures / Recurring Revenues			
1995	71%	87%	100%
1996	63%	75%	96%
Operating Surplus / National Tax Revenues [a]			
1995	27%	45%	90%
1996	36%	51%	97%
Operating Surplus / State Operating Subsidies [a]			
1995	150%	318%	1059%
1996	242%	838%	1714%
Overall Surplus per capita			
1995	460Kc	700Kc	1 560Kc
1996	490Kc	1 090Kc	1 680Kc
Operating Surplus per capita			
1995	(210)Kc[b]	320Kc	690Kc
1996	(40)Kc[b]	590Kc	1 080Kc

Notes:
[a] Sample size equals 18 (1995) and 19 (1996) - Excludes cases with operating deficit.
[b] The value in this case for both 1995 and 1996 is for the 20th percentile, that is, 20 percent of municipalities had a value equal to or lower than the figure shown in the table.

Indicators of Net Results, Municipalities Population 1001 - 2000

Indicator and Year	25% of the municipalities had an equal or lower value	50% of the municipalities had a lower value and 50% a higher value	75% of the municipalities had an equal or lower value
Total Expenditures / Total Revenues			
1995	76%	85%	88%
1996	78%	88%	94%
Operating Expenditures / Recurring Revenues			
1995	61%	69%	95%
1996	65%	72%	87%
Operating Surplus / National Tax Revenues [a]			
1995	75%	80%	159%
1996	37%	61%	76%
*Operating Surplus / State Operating Subsidies***State Operating Subsidies* [a]			
1995	322%	440%	552%
1996	281%	391%	645%
Overall Surplus per capita			
1995	580Kc	1 010Kc	1 320Kc
1996	430Kc	610Kc	1 230Kc
Operating Surplus per capita			
1995	0Kc [b]	790Kc	860Kc
1996	320Kc [b]	720Kc	920Kc

Notes:
[a] Sample size equals 10 (1995) and 12 (1996) - Excludes cases with operating deficit.
[b] The value in this case for both 1995 and 1996 is for the 20th percentile, that is, 20 percent of municipalities had a value equal to or lower than the figure shown in the table.

■ Actual to original budget performance indicators

What are actual to original budget indicators?
There are five actual to original budget indicators:
- Actual Revenues/Original Revenue Budget
- Actual Recurring Revenues/Original Recurring Revenue Budget
- Actual Expenditures/Original Expenditure Budget
- Actual Operating Expenditures/Original Operating Expenditure Budget
- Actual Capital Investments/Original Capital Investment Budget

What do the actual to original budget indicators measure?
These indicators look at the ratio of the initial budget projections to actual results. They are designed to analyze the degree of accuracy of budgets. While recognizing that municipal budgeting practices currently involve several budget revisions during a fiscal year, they look at the ability of the municipality to prepare an accurate budget early in the year.

Why are the actual to original budget indicators important?
As structural expenses (payroll and debt service) become a larger part of overall operating expenditures, the underlying cost components of operating expenditures will become less discretional and more difficult to control. The ability to prepare an accurate budget early in the year then becomes critical to the financial success of the municipality. Together, the indicators help understand how well a municipality can plan and manage its finances.

How significant are the actual to original budget indicators in the Znojmo District?
The indicators help explain how municipalities are managing their finances in the face of great uncertainty regarding their recurring and non-recurring revenues.

What do the actual to original budget indicators show in the Znojmo District?
(1) The Original Total Revenue and Recurring Revenue Budgets were greatly underestimated, more so in 1996 than in 1995. Municipalities have little or no control over many important sources of revenues. This is particularly true of those revenues that come from the State budget. The low initial estimate may represent a prudent approach to dealing with the uncertainty.

(2) The Original Total Expenditure, Operating Expenditure and Capital Expenditure Budgets are far less likely to be exceeded than is the case with the revenue budgets. In fact, roughly half the municipalities spent less than they originally budgeted. This suggests that municipalities monitor expenditures closely and that they have fairly clear ideas at the beginning of the year of how much they want to spend overall. This is a positive sign.

The smallest municipalities (1-500) appear inclined to reduce planned capital expenditures dramatically in order to maintain or increase planned operating expenditure levels.

Eventually, all municipalities should try to improve both revenue and expenditure estimates so they are much closer to end of year actual results.

Actual to Original Budget Performance Indicators Municipalities Population 1 - 500

Indicator and Year	25% of the municipalities had an equal or lower value	50% of the municipalities had a lower value and 50% a higher value	75% of the municipalities had an equal or lower value
Actual to Original Revenue Budget			
1995	106%	117%	141%
1996	111%	127%	150%
Actual to Original Recurring Revenue Budget			
1995	95%	106%	116%
1996	108%	118%	126%
Actual to Original Total Expenditure Budget			
1995	49%	80%	107%
1996	57%	82%	112%
Actual to Original Operating Expenditures Budget			
1995	75%	96%	121%
1996	89%	106%	126%
Actual to Original Capital Investments Budget [a]			
1995	12%	55%	118%
1996	16%	72%	132%

Notes:
[a] Sample equals 79 (1995) and 75 (1996) - Sample includes only cases with a capital expenditure budget.

Actual to Original Budget Performance Indicators Municipalities Population 501 - 1000

Indicator and Year	25% of the municipalities had an equal or lower value	50% of the municipalities had a lower value and 50% a higher value	75% of the municipalities had an equal or lower value
Actual to Original Revenue Budget			
1995	103%	120%	151%
1996	111%	130%	155%
Actual to Original Recurring Revenue Budget			
1995	101%	108%	117%
1996	109%	116%	126%
Actual to Original Total Expenditure Budget			
1995	77%	109%	119%
1996	78%	104%	135%
Actual to Original Operating Expenditures Budget			
1995	82%	104%	131%
1996	94%	104%	121%
Actual to Original Capital Investments Budget [a]			
1995	61%	92%	122%
1996	57%	107%	152%

Notes:
[a] Sample equals 23 (1995) - Sample includes only cases with capital expenditure budget.

Actual to Original Budget Performance Indicators Municipalities Population 1001 - 2000

Indicator and Year	25% of the municipalities had an equal or lower value	50% of the municipalities had a lower value and 50% a higher value	75% of the municipalities had an equal or lower value
Actual to Original Revenue Budget			
1995	112%	141%	153%
1996	112%	127%	151%
Actual to Original Recurring Revenue Budget			
1995	98%	111%	116%
1996	112%	119%	127%
Actual to Original Total Expenditure Budget			
1995	91%	103%	136%
1996	91%	103%	121%
Actual to Original Operating Expenditures Budget			
1995	89%	93%	103%
1996	94%	100%	118%
Actual to Original Capital Investments Budget			
1995	94%	105%	173%
1996	76%	106%	132%

■ Relative growth indicators

What are relative growth indicators?
There are three relative growth indicators:
- Change in Recurring Revenues/Change in Total Revenues
- Change in Operating Expenditures/Change in Recurring Revenues
- Change in Subsidies to Organizations/Change in Recurring Revenues

What do relative growth indicators measure?
These indicators look at how the change in revenues compares to the change in expenditures over time. These indicators also look at the relative importance and relative growth rate of expenditures made through budgetary and contributory organizations.

Why are relative growth indicators important?
The fact that a municipality has an operating surplus or deficit in one year does not necessarily indicate what will happen in the future. The key question is whether the growth of operating expenditures is matched by the growth in recurring revenues. Faster growing expenditures will eventually lead to a deficit, particularly if revenue growth decreases. Conversely, faster revenue growth will generate or maintain a future surplus.

How significant are relative growth indicators in the Znojmo District?
These indicators would be more useful with at least one more year of data because it takes two years of data to calculate the indicator. The results for 1995 and 1996 produce only one set of indicators, as shown in the accompanying page.

The indicators also are impossible to evaluate on their own, that is, without reference to other related indicators. For example, if operating expenditures are growing faster than recurring revenues, that could be a serious problem for a municipality with a low operating surplus and high operating expenditures per capita. It would not be a problem, at least in the short run, for a municipality that has a large operating surplus and low operating expenditures per capita.

In the former case, the higher rate of growth of operating expenditures over recurring revenues would suggest that the municipality is trying to provide more services than it can afford. In the latter case, the indicator might show simply that the municipality has decided to take advantage of its surplus to provide more services to its community. As long as the rate of growth of expenditures tapers off when the operating surplus reaches minimal safe levels of 5 or 10 percent, there would be no problem.

What do relative growth indicators show in the Znojmo District?
Not applicable.

Relative Growth Indicators

Indicator and Year	25% of the municipalities had an equal or lower value	50% of the municipalities had a lower value and 50% a higher value	75% of the municipalities had an equal or lower value
MUNICIPALITIES POPULATION 1 - 500			
Change in Recurring Revenues / Change in Total Revenues			
1995 to 1996	92%	105%	128%
Change in Operating Expenditures / Change in Recurring Revenues			
1995 to 1996	77%	94%	121%
Change in Subsidies to Organizations / Change in Recurring Revenues [a]			
1995 to 1996	48%	108%	254%
MUNICIPALITIES POPULATION 501 - 1000			
Change in Recurring Revenues / Change in Total Revenues			
1995 to 1996	93%	107%	147%
Change in Operating Expenditures / Change in Recurring Revenues			
1995 to 1996	82%	94%	101%
Change in Subsidies to Organizations / Change in Recurring Revenues [a]			
1995 to 1996	79%	295%	1017%
MUNICIPALITIES POPULATION 1001 - 2000			
Change in Recurring Revenues / Change in Total Revenues			
1995 to 1996	80%	117%	126%
Change in Operating Expenditures / Change in Recurring Revenues			
1995 to 1996	90%	97%	118%
Change in Subsidies to Organizations / Change in Recurring Revenues [a]			
1995 to 1996	229%	746%	2894%

Notes:
[a] Sample size equals 46 (Population 1 - 500), 15 (Population 501 - 1001), 7 (Population 1001 - 2000) -

Sample includes only those cases with subsidies to organizations.

■ Indicators of outstanding debt and debt service

What are indicators of outstanding debt and debt service?
There are five indicators of outstanding debt and debt service:
- Long-term Debt/Total Assets
- Long-term Debt/Population
- Total Annual Debt Service/Recurring Revenues
- Total Annual Debt Service/Operating Surplus before Debt Service
- Total Annual Debt Service/Cash & Short-Term Financial Assets

What are long-term liabilities and annual debt service?
Long-term liabilities are those that are to be repaid in a period greater than one year. Annual debt service refers to the resources accumulated in one year to pay the maturing debt principal and interest on long-term liabilities.

What do indicators of outstanding debt and debt service measure?
The analysis of outstanding debt looks at the amount of long-term debt liabilities relative to the value of assets owned by the municipality and relative to its population. The analysis of debt service looks at the share of recurring revenues required to meet annual payments of interest and principal. It also looks at the trend in this ratio.

Why are indicators of outstanding debt and debt service important?
These are the classic indicators to monitor debt and the ability of a municipality to meet its debt service obligations. The lower the percentage of debt service to recurring revenues and current assets such as cash, the better. Conversely, the higher the ratio of debt service to revenues and current assets, the greater the burden to the municipality of meeting the payments on its outstanding loans. The indicators are most useful when used in conjunction with all the preceding indicators. A municipality with lower risk levels and stronger performance in the other categories, such as net operating results and structure or recurring revenues, probably can afford higher levels of debt service.

How significant are the indicators of outstanding debt and debt service in the Znojmo District?
The indicators provide a useful picture of the borrowing activity of municipalities in Znojmo and of their ability to repay debt.

What do the indicators of outstanding debt and debt service show in the Znojmo District?
(1) The incidence of long-term debt is growing. The number of municipalities with long-term debt increased from 18 in 1995 to 31 in 1996 - one out of every four municipalities in the District. Six and 12 of these, correspondingly, are in municipalities with 500 or less inhabitants.

(2) Debt as percent of total assets is growing. This is not necessarily a sign of a problem. It shows the willingness of the municipalities to use debt to finance investments. The trend suggests the need for prudence in incurring future debt.

(3) For most municipalities that have borrowed, Total Annual Debt Service is affordable within their Operating

Surplus before Debt Service. One in four may be having trouble meeting their debt service obligations from recurring revenues.

Indicators of Outstanding Debt and Debt Service Municipalities Population 1 - 500

Indicator and Year	25% of the municipalities had an equal or lower value	50% of the municipalities had a lower value and 50% a higher value	75% of the municipalities had an equal or lower value
Long-term Debt / Total Assets [a]			
1995	7%	8%	9%
1996	6%	10%	22%
Long-term Debt / Population			
1995	0Kc	0Kc	0Kc
1996	0Kc	0Kc	0Kc
Total Annual Debt Service / Recurring Revenues			
1995	0%	0%	0%
1996	0%	0%	0%
Total Annual Debt Service / Operating Surplus before Debt Service [b]			
1995	4%	80%	157%
1996	23%	69%	112%
Debt Service per capita			
1995	0Kc	0Kc	0Kc
1996	0Kc	0Kc	0Kc

Notes:
[a] Sample equals 6 (1995) and 12 (1996) - Sample includes only cases with debt.
[b] Sample equals 2 (1995) and 12 (1996) - Sample includes only cases with debt service.

Indicators of Outstanding Debt and Debt Service Municipalities Population 501 - 1000

Indicator and Year	25% of the municipalities had an equal or lower value	50% of the municipalities had a lower value and 50% a higher value	75% of the municipalities had an equal or lower value
Long-term Debt / Total Assets [a]			
1995	4%	9%	16%
1996	6%	8%	17%
Long-term Debt / Population			
1995	0Kc	0Kc	930Kc
1996	0Kc	250Kc	2 150Kc
Total Annual Debt Service / Recurring Revenues			
1995	0%	0%	0%
1996	0%	0%	8%
Total Annual Debt Service / Operating Surplus before Debt Service [b]			
1995	62%	121%	236%
1996	26%	62%	148%
Debt Service per capita			
1995	0Kc	0Kc	0Kc
1996	0Kc	0Kc	210Kc

Notes:
[a] Sample equals 7 (1995) and 13 (1996) - Sample includes only cases with debt.
[b] Sample equals 5 (1995) and 8 (1996) - Sample includes only cases with debt service.

Indicators of Outstanding Debt and Debt Service Municipalities Population 1001 - 2000

Indicator and Year	25% of the municipalities had an equal or lower value	50% of the municipalities had a lower value and 50% a higher value	75% of the municipalities had an equal or lower value
Long-term Debt / Total Assets [a]			
1995	7%	8%	10%
1996	9%	12%	13%
Long-term Debt / Population			
1995	0Kc	0Kc	1 380Kc
1996	0Kc	0Kc	2 910Kc
Total Annual Debt Service / Recurring Revenues			
1995	0%	0%	5%
1996	0%	0%	13%
Total Annual Debt Service / Operating Surplus before Debt Service [b]			
1995	8%	45%	133%
1996	27%	64%	68%
Debt Service per capita			
1995	0Kc	0Kc	100Kc
1996	0Kc	0Kc	350Kc

Notes:
[a] Sample equals 5 (1995) and 6 (1996) - Sample includes only cases with debt.
[b] Sample equals 4 (1995) and 5 (1996) - Sample includes only cases with debt service.

■ Operating expenditure indicators by purpose

What are operating expenditure indicators by purpose?
There are eleven operating expenditure indicators by purpose, one for each chapter:

- Water Management and Environment Expenditures/Population
- Agriculture and Nutrition Expenditures/Population
- Transportation Expenditures/Population
- Trade Expenditures/Population
- Education Expenditures/Population
- Health Care Expenditures/Population
- Culture Expenditures/Population
- Internal Administration Expenditures/Population
- Labor and Social Affairs Expenditures/Population
- Construction Expenditures/Population
- General Treasury Management Expenditures/Population

What do operating expenditure indicators by purpose measure?
These indicators look at how much a municipality is spending per capita in each of the eleven spending categories included in the form Uč1-12. They also look at trends in these per capita expenditures measured in constant crowns, that is, without the effect of inflation. This will show if the real value of expenditures is increasing or decreasing.

Why are operating expenditure indicators by purpose important?
Several of the prior indicators use operating expenditures to measure some aspect of municipal financial performance. If the analysis of those indicators shows that there is a problem or potential problem with operating expenditure levels, it is useful and important to be able to look at the details of those expenditures to determine where the problem may lie. The indicators of operating expenditures by purpose provide such details.

How significant are the operating expenditure indicators by purpose in the Znojmo District?
These indicators provide a consistent picture of the structure of operating expenditures in the District.

What do the operating expenditure indicators by purpose show in the Znojmo District?
(1) Internal administration expenditures are the highest of those for any chapter. They also grew in real terms at over 20 percent between 1995 and 1996. The smallest municipalities (1-500) have the highest per capita expenditures.

(2) Education expenditures are the next highest but are not growing in real terms. They actually decreased slightly between 1995 and 1996 after discounting the effect of inflation.

(3) Expenditures for Water and for the Local Economy are roughly comparable in level and next highest after education. The level of expenditures remained fairly stable between 1995 and 1996. The smallest municipalities (1-500) tend to have higher per capita expenditures.

(4) Transportation expenditures are growing rapidly, although the absolute level is still relatively low compared to expenditures in other chapters.

(5) Expenditures in all other chapters are negligible.

Operating Expenditure Indicators by Purpose Municipalities Population 1 - 500

Indicator and Year	25% of the municipalities had an equal or lower value	50% of the municipalities had a lower value and 50% a higher value	75% of the municipalities had an equal or lower value
Water and Environment Operating Expenditures per capita			
1995	90Kc	140Kc	230Kc
1996	90Kc	140Kc	230Kc
Agriculture and Nutrition Operating Expenditures per capita			
1995	0Kc	0Kc	0Kc
1996	0Kc	0Kc	0Kc
Transportation Operating Expenditures per capita			
1995	0Kc	0Kc	40Kc
1996	60Kc	70Kc	90Kc
Trade Operating Expenditures per capita			
1995	0Kc	0Kc	0Kc
1996	0Kc	0Kc	0Kc
Education Operating Expenditures per capita			
1995	0Kc	30Kc	250Kc
1996	0Kc	30Kc	320Kc
Health Operating Expenditures per capita			
1995	0Kc	0Kc	0Kc
1996	0Kc	0Kc	0Kc
Culture Operating Expenditures per capita			
1995	0Kc	30Kc	90Kc
1996	0Kc	20Kc	70Kc
Internal Administration Operating Expenditures per capita			
1995	530Kc	690Kc	1 170Kc
1996	670Kc	920Kc	1 260Kc
Labor and Social Operating Expenditures per capita			
1995	0Kc	0Kc	10Kc
1996	0Kc	0Kc	0Kc
Local Economy Operating Expenditures per capita			
1995	60Kc	110Kc	170Kc
1996	60Kc	100Kc	210Kc
Construction Operating Expenditures per capita			
1995	0Kc	0Kc	0Kc
1996	0Kc	0Kc	0Kc

Operating Expenditure Indicators by Purpose Municipalities Population 501 - 1000

Indicator and Year	25% of the municipalities had an equal or lower value	50% of the municipalities had a lower value and 50% a higher value	75% of the municipalities had an equal or lower value
Water and Environment Operating Expenditures per capita			
1995	110Kc	140Kc	190Kc
1996	90Kc	120Kc	180Kc
Agriculture and Nutrition Operating Expenditures per capita			
1995	0Kc	0Kc	0Kc
1996	0Kc	0Kc	0Kc
Transportation Operating Expenditures per capita			
1995	0Kc	10Kc	20Kc
1996	60Kc	70Kc	80Kc
Trade Operating Expenditures per capita			
1995	0Kc	0Kc	0Kc
1996	0Kc	0Kc	0Kc
Education Operating Expenditures per capita			
1995	310Kc	450Kc	860Kc
1996	290Kc	400Kc	820Kc
Health Operating Expenditures per capita			
1995	0Kc	0Kc	10Kc
1996	0Kc	0Kc	20Kc
Culture Operating Expenditures per capita			
1995	10Kc	20Kc	120Kc
1996	10Kc	30Kc	80Kc
Internal Administration Operating Expenditures per capita			
1995	550Kc	750Kc	900Kc
1996	620Kc	830Kc	980Kc
Labor and Social Operating Expenditures per capita			
1995	0Kc	0Kc	10Kc
1996	0Kc	0Kc	10Kc
Local Economy Operating Expenditures per capita			
1995	80Kc	150Kc	270Kc
1996	70Kc	140Kc	310Kc
Construction Operating Expenditures per capita			
1995	0Kc	0Kc	10Kc
1996	0Kc	0Kc	10Kc

Operating Expenditure Indicators by Purpose Municipalities Population 1001 - 2000

Indicator and Year	25% of the municipalities had an equal or lower value	50% of the municipalities had a lower value and 50% a higher value	75% of the municipalities had an equal or lower value
Water and Environment Operating Expenditures per capita			
1995	100Kc	140Kc	250Kc
1996	90Kc	110Kc	180Kc
Agriculture and Nutrition Operating Expenditures per capita			
1995	0Kc	0Kc	0Kc
1996	0Kc	0Kc	0Kc
Transportation Operating Expenditures per capita			
1995	0Kc	20Kc	40Kc
1996	60Kc	80Kc	150Kc
Trade Operating Expenditures per capita			
1995	0Kc	0Kc	0Kc
1996	0Kc	0Kc	0Kc
Education Operating Expenditures per capita			
1995	520Kc	550Kc	660Kc
1996	490Kc	540Kc	720Kc
Health Operating Expenditures per capita			
1995	0Kc	0Kc	0Kc
1996	0Kc	0Kc	0Kc
Culture Operating Expenditures per capita			
1995	30Kc	50Kc	60Kc
1996	20Kc	30Kc	40Kc
Internal Administration Operating Expenditures per capita			
1995	520Kc	620Kc	750Kc
1996	610Kc	750Kc	880Kc
Labor and Social Operating Expenditures per capita			
1995	0Kc	0Kc	0Kc
1996	0Kc	0Kc	0Kc
Local Economy Operating Expenditures per capita			
1995	90Kc	130Kc	190Kc
1996	90Kc	130Kc	190Kc
Construction Operating Expenditures per capita			
1995	0Kc	0Kc	20Kc
1996	0Kc	0Kc	50Kc

SPECIAL ANALYSIS: DIFFERENCES AMONG MUNICIPALITIES

The analysis of the financial performance indicators shows that the small municipalities in the Znojmo District are a diverse group. This diversity appears to increase the smaller the population group. To test for diversity, the per capita indicators were ranked in ascending order from those with the lowest value to those with the highest. The 25th percentile is the value at which 25 percent of the municipalities had a lower value and 75 percent had a higher value. The 75th percentile is the reverse: the value at which 75 percent of the municipalities had a lower value and 25 percent a higher value. The data below the 25th percentile are known as the bottom quartile and the data above the 75th percentile are known as the top quartile. The central half of the data lies between the 25th and 75th percentile, so comparing these numbers helps to understand how closely the data are clustered around a central value.

The results of this analysis for certain key indicators are illustrated in the following table.

		Population 1 - 500			Population 1001 - 2000		
Per capita Indicator	Year	25th Percentile	75th Percentile	Ratio of 75th to 25th	25th Percentile	75th Percentile	Ratio of 75th to 25th
Local Revenues	1995	700Kc	1 440Kc	2.1	1 150Kc	1 450Kc	1.3
	1996	880Kc	1 650Kc	1.9	1 180Kc	1 430Kc	1.2
Non-recurring Revenues	1995	1 710Kc	3 760Kc	2.2	1 550Kc	3 790Kc	2.4
	1996	1 460Kc	3 870Kc	2.7	1 330Kc	4 100Kc	3.1
Operating Expenditures	1995	1 070Kc	2 230Kc	2.1	1 800Kc	2 650Kc	1.5
	1996	1 170Kc	2 600Kc	2.2	1 840Kc	2 440Kc	1.3
Total Expenditures	1995	1 710Kc	4 600Kc	2.7	3 270Kc	7 350Kc	2.2
	1996	1 880Kc	4 580Kc	2.4	3 500Kc	7 280Kc	2.1
Capital Investments	1995	240Kc	2 030Kc	11.0	1 380Kc	4 920Kc	3.6
	1996	110Kc	2 350Kc	18.5	1 060Kc	3 630Kc	3.4
Overall Surplus	1995	730Kc	2 350Kc	3.2	580Kc	1 320Kc	2.3
	1996	1 070Kc	2 810Kc	2.6	430Kc	1 230Kc	2.9
Operating Surplus	1995	0Kc	880Kc	[a]	120Kc	860Kc	7.2
	1996	110Kc	1 090Kc	9.9	370Kc	920Kc	2.5
National Tax Revenues	1995	800Kc	1 000Kc	1.3	920Kc	1 140Kc	1.2
	1996	1 080Kc	1 320Kc	1.2	1 140Kc	1 460Kc	1.3

Notes:
[a] Ratio cannot be calculated because of zero denominator.
[b] The population group 501 - 1,000 is not presented here for lack of space. Its values fall roughly in

the middle of the other two groups.

As the table shows, there is significant variation in both 1995 and 1996 in the distribution of indicator values. In many cases, a municipality in the bottom quartile has half or less revenues per capita compared to a municipality in the top quartile and spends half or less as much. For the smallest population group, capital investments per capita for the bottom quartile are less than a tenth that of the top quartile. Both overall surplus per capita and operating surplus per capita are also indicators that show a great deal of variability for the small municipalities in the Znojmo District. National tax revenues per capita are an interesting exception. In the case of this indicator, the difference in value between the 25th and 75th quartiles is only about 20 or 30 percent. This is to be expected since national tax revenues are distributed following uniform rules that apply to all municipalities.

SPECIAL ANALYSIS: STRONG AND WEAK MUNICIPALITIES

Another interesting pattern that developed from the analysis is that there are significant differences between municipalities that had exceptionally strong and exceptionally weak financial results in both 1995 and 1996. These two groups were defined as follows:

Weak	Strong
Operating expenditures exceeded recurring revenues in both 1995 and 1996	Recurring revenues exceded operating expenditures by at least 10 percent in 1995 and 1996 Total revenues exceded total expenditures by at least 10 percent in 1995 and 1996

Fourteen weak municipalities registered an operating deficit two years in a row. The municipalities covered the operating deficit with non-recurring revenues. This is a very conservative definition of a poor financial performance. It points to a serious imbalance between the services that the municipalities are providing and the capacity to pay for them in the long run. The fifty-three strong municipalities all had an operating surplus of at least 10 percent and an overall surplus of at least 10 percent in both 1995 and 1996. This is a very conservative definition of a strong financial performance. It provides an opportunity to look for contrasts in the values of the indicators with those of the weak municipalities. These contrasts might provide clues about the financial characteristics that cause significant variations in the financial condition of the municipalities.

The weak and strong groups are fairly evenly divided among the three size categories of municipalities, as shown in the table below. Those with 501 to 1000 inhabitants had a higher proportion of weak municipalities than the other two categories.

Two Year Operating Surplus (Deficit) By Size of Population

	Population 1 - 500	Population 501 - 1000	Population 1001 - 2000	All municipalities with population less than 2000
Middle ground	41 46%	12 50%	6 46%	59 47%
Large surplus both years	40 45%	7 29%	6 46%	53 42%
Operating deficit both years	8 9%	5 21%	1 8%	14 11%
Total	89 100%	24 100%	13 100%	126 100%

The analysis looked for possible patterns in all indicators that might explain the difference between the two groups. The following table shows the average values for those indicators that appear to explain at least part of the variation in financial performance.

Indicator	Year	Strong	All	Weak
Actual to Original Revenue Budget	1995 1996	122% 136%	131% 150%	137% 148%
Actual to Original Expenditure Budget	1995 1996	76% 76%	92% 105%	100% 113%
Actual to Original Recurring Revenue Budget	1995 1996	110% 121%	109% 119%	102% 105%
Actual to Original Operating Expenditure Budget	1995 1996	94% 101%	102% 115%	108% 123%
Internal Administration Expenditures per Capita	1995 1996	634Kc 755Kc	899Kc 1 015Kc	1 542Kc 1 301Kc

All municipalities, not just the weak or the strong, appear to underestimate their revenues, both total and recurring, at the beginning of the year. As noted in the prior discussion of the budget to actual indicators, municipalities have little or no control over many important sources of revenues. This is particularly true of those revenues that come from the

State budget. The low initial estimate may represent a prudent approach to dealing with the uncertainty. The average percent increase in total expenditures for all three groups is less than the percent increase in revenues. This suggests that municipalities monitor total expenditures most closely. They have fairly clear ideas at the beginning of the year of how much they want to spend overall. They keep total expenditures below total revenues.

The difference between the weak and strong municipalities shows in the management of the operating expenditure budget. The fifty-three strong municipalities seem to adopt a fairly accurate original operating expenditure budget. On average, their actual operating expenditures for the year were within 94 and 101 percent of their original budget in 1995 and 1996, respectively. This is sound budgeting. The reverse is true for the fourteen weak municipalities. Their actual operating expenditures at year end were 108 and 123 percent of their original estimates in 1995 and 1996, respectively. What also is significant is that the percent increase in their operating expenditures over original estimates was much higher than the corresponding increase in recurring revenues over the original estimate. What this suggests is that the weak municipalities are less able or less willing than the strong ones to stay within their original operating expenditure budget.

Finally, there is a considerable difference between the weak and strong municipalities with respect to the level of internal administration expenditures per capita. This category covers the cost of operating the city hall, as well as costs associated with the local council. The average expenditures in this category for the weak municipalities were 2.43 and 1.28 times those for the strong municipalities in 1995 and 1996, respectively. These are all small municipalities with limited budgets. A relatively small absolute increase in expenditures in one municipality can produce a sizeable difference by comparison with other municipalities. But, there appears to be more to the high levels of expenditures on internal administration in the weak municipalities. A comparison with the five municipalities in the Znojmo District with more than 2,000 inhabitants shows that the internal administration expenditures per capita in the strong municipalities are relatively in line with those of their larger neighbors. Those in the weak municipalities are much higher. The data available for the analysis is insufficient to explain these differences. This is a situation that the affected municipalities in the Znojmo District may want to analyze further.

ANNEXES

PART I

ANNEX I

PREPARATION OF THE DATA

STEP 1: CALCULATING THE STANDARD DATA SET

Calculate the standard data set using three data sources: The data source for most calculations is the Statement on Budget Performance of Municipalities and District Offices known as Form 1-12. The second source is the balance sheet of budgetary and contributory organizations, Form ROPO 3-02. The third source is the survey of assets and liabilities for communities with less than 3000 inhabitants, known as Form 6-01. The standard data set should be calculated in current crowns for the three most recent years for which the data are final.

Ref No.	Name		Form, Row	Calculation
Revenues				
D1	National Tax Revenues			National Tax Revenues calculated as:
		plus	1-12, 80	Shared Revenues: Corporate Income Tax
		plus	1-12, 98	Shared Revenues: Personal Income Tax
		plus	1-12, 99	Shared Revenues: Unincorporated Tax
D2	State Operating Subsidies			State Operating Subsidies equal sum of:
		plus	1-12, 142	Total Subsidies - Actual Year End
D3	Local Revenues			Local Revenues equal sum of:
		plus	1-12, 105	Total Own Budgetary Revenues - Actual Year End
		minus	1-12, 80	(Shared Revenues: Corporate Income Tax)
		minus	1-12, 98	(Shared Revenues: Personal Income Tax)
		minus	1-12, 99	(Shared Revenues: Unincorporated Tax)
		plus	1-12, 131	Total for Grouping of Items 21 - Actual Year End
		minus	1-12, 114	(State Insurance Fund Transfers - Actual Year End)
		minus	1-12, 116	(Proceeds from Property Sales - Actual Year End)
		minus	1-12, 120	(Other and Random Revenues - Actual Year End)
		minus	1-12, 130	(Gifts Received - Actual Year End)
D4	Recurring Revenues - Actual			Recurring Revenues equal sum of:
		plus	D1	National Tax Revenues
		plus	D2	State Operating Subsidies
		plus	D3	Local Revenues

Ref No.	Name		Form, Row	Calculation
D5	Non-recurring Revenues - Actual			Non-recurring Revenues equal sum of:
		plus	1-12,108	Total for Grouping of Items 20
		plus	1-12, 114	State Insurance Fund Transfers - Actual Year End
D6	Proceeds from Property Sales	plus	1-12, 116	Proceeds from Property Sales - Actual Year End
		plus	1-12, 120	Other and Random Revenues - Actual Year End
		plus	1-12, 130	Gifts Received - Actual Year End
		plus	1-12, 141	Total for Grouping of Items 22
		plus	1-12, 152	Total for Grouping of Items 24
		minus	1-12, 142	(Total Subsidies - Actual Year End)
D7	Total Revenues - Year End Actual			Total Revenues equal sum of:
		plus	D5	Non-recurring Revenues
		plus	D4	Recurring Revenues
D8	Original Recurring Revenue Budget			Original Recurring Revenue Budget equals sum of:
		plus	1-12, 105	Total Own Budgetary Revenues - Original Budget
		plus	1-12, 131	Total for Grouping of Items 21 - Original Budget
		minus	1-12, 114	(State Insurance Fund Transfers - Original Budget)
		minus	1-12, 116	(Proceeds from Property Sales - Original Budget)
		minus	1-12, 120	(Other and Random Revenues - Original Budget)
		minus	1-12, 130	(Gifts Received - Original Budget)
		plus	1-12, 142	Total Subsidies - Original Budget
D9	Original Revenue Budget		1-12, 25	

Ref No.	Name	Form, Row	Calculation
Expenditures			
D10	Operating Expenditures		Operating Expenditures equal sum of:
D11	plus	1-12, 79, sl.11	Expenditures of Budgetary Orgs - Actual
D12	plus	1-12, 79, sl.13	Operating Subsidies to Contributory Orgs - Actual
D13	plus	1-12, 79, sl. 15	Operating Subsidies to State Firms - Actual
D14	Capital Investments		Capital Investments equal sum of:
	plus	1-12, 79, sl.12	Investments by Budgetary Orgs - Actual
	plus	1-12, 79, sl. 14	Investment Subsidies to Contributory Orgs - Actual
	plus	1-12, 79, sl. 16	Investment Subsidies to State Firms - Actual
D15	Total Expenditures		Total Expenditures equal sum of:
	plus	D10	Operating Expenditures
	plus	D14	Capital Investments
D16	Original Operating Budget		Original Operating Budget equals sum of:
	plus	1-12, 78, sl. 11	Expenditures of Budgetary Orgs - Original Budget
	plus	1-12, 78, sl. 13	Operating Subsidies to Contributory Orgs - Original Budget
	plus	1-12, 78, sl. 15	Operating Subsidies to State Firms - Original Budget
D17	Original Investment Budget		Original Investment Budget equals sum of:
	plus	1-12, 78, sl. 12	Investments by Budgetary Orgs - Original Budget
	plus	1-12, 78, sl. 14	Investment Subsidies to Contributory Orgs - Original Budget
	plus	1-12, 78, sl. 16	Investment Subsidies to State Firms - Original Budget
D18	Original Expenditure Budget		Original Expenditure Budget: equals sum of:
	plus	D16	Original Operating Budget
	plus	D17	Original Investment Budget
D19	Overall Surplus (Deficit)		Overall Surplus (Deficit) equal sum of
	plus	D7	Total Revenues
	minus	D15	(Total Expenditures)

Ref No.	Name		Form, Row		Calculation
Liquidity			Cities with > 3000 inhabitants	Communities with <= 3000 inhabitants	
D20	Total Assets		3-02, 72,sl.2	6-01,37,sl.2	
D21	Short-Term Assets				Short-Term Assets equals sum of:
		plus	3-02, 51, sl.2	6-01, 35+36, sl.2	Accounts Receivable
D22	Cash & Short-Term Financial Assets	plus	3-02, 55, sl.2	6-01,31+32 + 33+34, sl.2	Cash and Short-Term Financial Assets
D23	Short-Term Liabilities				Short-Term Liabilities equal sum of:
		plus	3-02, 119, sl.2	None	Short Term Bank Loans
D24	Notes and Accounts Payable	plus	3-02, 117, sl.2	6-01,38,sl.2	Notes and Accounts Payable
Outstanding Debt					
D25	Short-Term Debt				Short-Term Debt equals sum of:
		plus	3-02, 119, sl.4	6-01, 38, sl.2	Short Term Bank Loans
		plus	3-02, 120, sl.4	None	"Received Financial Assistance"
D26	Long-Term Debt				Long-Term Debt equals sum of:
		plus	3-02, 109, sl.4	None	Other Long-Term Liabilities - Total
		plus	3-02, 118, sl.4	6-01, 40, sl.2	Long Term Bank Loans
D27	Total Outstanding Debt				Total Outstanding Debt equals sum of:
		plus		D25	Short-Term Debt
		plus		D26	Long-Term Debt

Ref No.	Name		Form, Row	Calculation
Annual Debt Service				
D28	Total Annual Debt Service			Total Annual Debt Service equals sum of:
D29		plus	1-12, 159	Amortization of Debt
D30		plus	1-12, 160	Interest Payments
D31	Operating Surplus Before Debt Service			Operating Surplus Before Debt Service equals sum of:
		plus	D4	Recurring Revenues
		minus	D10	(Operating Expenditures)
		plus	D28	Total annual debt service
Expenditures by Chapter				
D32	Water Mgmt and Environment Total			Water Management and Environment Total equals sum of:
		plus	1-12, 55, sl.11	Expenditures of Budgetary Organizations
		plus	1-12, 55, sl.13	Operating Subsidies to Contributory Organizations
		plus	1-12, 55, sl.15	Operating Subsidies to State Firms
D33	Agriculture and Nutrition Total			Agriculture and Nutrition Total equals sum of:
		plus	1-12, 57, sl.11	Expenditures of Budgetary Organizations
		plus	1-12, 57, sl.13	Operating Subsidies to Contributory Organizations
		plus	1-12, 57, sl.15	Operating Subsidies to State Firms
D34	Transportation Total			Transportation Total equals sum of:
		plus	1-12, 59, sl.11	Expenditures of Budgetary Organizations
		plus	1-12, 59, sl.13	Operating Subsidies to Contributory Organizations
		plus	1-12, 59, sl.15	Operating Subsidies to State Firms
D35	Trade Total			Trade Total equals sum of:
		plus	1-12, 61, sl.11	Expenditures of Budgetary Organizations
		plus	1-12, 61, sl.13	Operating Subsidies to Contributory Organizations
		plus	1-12, 61, sl.15	Operating Subsidies to State Firms
D36	Education Total			Education Total equals sum of:
		plus	1-12, 63, sl.11	Expenditures of Budgetary Organizations
		plus	1-12, 63, sl.13	Operating Subsidies to Contributory Organizations
		plus	1-12, 63, sl.15	Operating Subsidies to State Firms

D37 Health Care Total			Health Care Total equals sum of:
	plus	1-12, 65, sl.11	Expenditures of Budgetary Organizations
	plus	1-12, 65, sl.13	Operating Subsidies to Contributory Organizations
	plus	1-12, 65, sl.15	Operating Subsidies to State Firms
D38 Culture Total			Culture Total equals sum of:
	plus	1-12, 67 sl.11	Expenditures of Budgetary Organizations
	plus	1-12, 67, sl.13	Operating Subsidies to Contributory Organizations
	plus	1-12, 67, sl.15	Operating Subsidies to State Firms
D39 Internal Administration Total			Internal Administration Total equals sum of:
	plus	1-12, 69, sl.11	Expenditures of Budgetary Organizations
	plus	1-12, 69, sl.13	Operating Subsidies to Contributory Organizations
	plus	1-12, 69, sl.15	Operating Subsidies to State Firms
D40 Labor and Social Affairs Total			Labor and Social Affairs Total equals sum of:
	plus	1-12, 71, sl.11	Expenditures of Budgetary Organizations
	plus	1-12, 71, sl.13	Operating Subsidies to Contributory Organizations
	plus	1-12, 71, sl.15	Operating Subsidies to State Firms
D41 Local Economy Total			Local Economy Total equals sum of:
	plus	1-12, 73, sl.11	Expenditures of Budgetary Organizations
	plus	1-12, 73, sl.13	Operating Subsidies to Contributory Organizations
	plus	1-12, 73, sl.15	Operating Subsidies to State Firms
D42 Construction Total			Construction Total equals sum of:
	plus	1-12, 75, sl.11	Expenditures of Budgetary Organizations
	plus	1-12, 75, sl.13	Operating Subsidies to Contributory Organizations
	plus	1-12, 75, sl.15	Operating Subsidies to State Firms
D43 General Treasury Mgmt Total			General Treasury Management Total equals sum of:
	plus	1-12, 77, sl.11	Expenditures of Budgetary Organizations
	minus	D28	(Debt Service)
	plus	1-12, 77, sl.13	Operating Subsidies to Contributory Organizations
	plus	1-12, 77, sl.15	Operating Subsidies to State Firms

Non Financial Data

D44 Municipal Population	Reported by the city or from the Statistical Yearbook

STEP 2: CALCULATING FINANCIAL INDICATORS (RATIO INDICATORS)

A. Municipal Financial Characteristics		**Calculation**
A.1 Key Revenue Indicators		
A.1.1	Recurring Revenues/Total Revenues	D4 / D7
A.1.2	National Tax Revenues/Recurring Revenues	D1 / D4
A.1.3	State Operating Subsidies/Recurring Revenues	D2 / D4
A.1.4	Local Revenues/Recurring Revenues	D3 / D4
A.1.5	Proceeds from Asset Sales/Total revenues	D6 / D7
A.2 Key Expenditure Indicators		
A.2.1	Total Expenditures Per Capita	See Step 3 “Per Capita Indicators”
A.2.2	Operating Expenditures Per Capita	See Step 3 “Per Capita Indicators”
A.2.3	Operating Expenditures/Total Expenditures	D10 / D15
A.2.4	Capital Investments/Total Expenditures	D14 / D15
A.2.5	Expenditures of Budgetary Orgs/Operating Expenditures	D11 / D10
A.2.6	Subsidies to Contributory Orgs/Operating Expenditures	D12 / D10
A.2.7	Subsidies to Other Orgs/Operating Expenditures	D13 / D10
B. Municipal Financial Performance		
B.1 Key Indicators of Net Results		
B.1.1	Total Expenditures/Total Revenues	D15 / D7
B.1.2	Operating Expenditures/Recurring Revenues	D10 / D4
B.1.3	Operating Surplus/National Tax Revenues	(D4 - D10) / D1
B.1.4	Operating Surplus/State Operating Subsidies	(D4 - D10) / D2
B.2 Key Actual to Original Budget Performance Indicators		
B.2.1	Actual Revenues/Original Revenue Budget	D7 / D9
B.2.2	Actual Recurring Revenues/Original Recurring Revenue Budget	D4 / D8
B.2.3	Actual Expenditures/Original Expenditure Budget	D15 / D18
B.2.4	Actual Operating Expenditures/Original Operating Budget	D10 / D16
B.2.5	Actual Capital Investments/Original Investment Budget	D14 / D17

B.3 Key Relative Growth Indicators		**Calculation**
B.3.1	Change Recurring Revenues/Change Total Revenues	(D4 year 96 / D4 year 95) / (D7 year 96 / D7 year 95)
B.3.2	Change Operating Expenditures/Change Recurring Revenues	(D10 year 96 / D10 year 95) / (D4 year 96 / D4 year 95)
B.3.3	Change Subsidies to Orgs/Change Operating Expenditures	((D12 + D13 year 96) / (D12 + D13 year 95)) / (D10 year 96 / D10 year 95)
B.4 Key Liquidity Indicators		
B.4.1	Notes & Accounts Payable/Recurring Revenues	D24 / D4
B.4.2	Short-Term Assets/Short-term Liabilities	D21 / D23
B.4.3	Overall Surplus/Recurring Revenues	D19 / D4

C. Municipal Debt Position

C.1 Key Indicators of Outstanding Debt		
C.1.1	Long-Term Debt/Total Assets	D26 / D20
C.1.2	Long-Term Debt/Population	See Step 3 “Per Capita Indicators”
C.2 Key Debt Service Indicators		
C.2.1	Total Annual Debt Service/Recurring Revenues	D28 / D4
C.2.2	Interest Payments/Recurring Revenues	D30 / D4
C.2.3	Total Annual Debt Service/Operating Surplus Before Debt Service	D28 / D31
C.2.4	Total Annual Debt Service/Cash & Short-Term Financial Assets	D28 / D22

STEP 3: CALCULATING PER CAPITA INDICATORS IN REAL TERMS

Nominal per capita indicators are calculated by dividing the data item by the population. To achieve comparable data, all per capita indicators shall be converted to 1991 Czech crowns. The conversion factor for 1994 is 1.47, for 1995 is 1.61 and for 1996 is 1.75. Divide the per capita data by the appropriate conversion factor to create per capita indicators in real terms.

Indicator		Base	1994	1995	1996
D.1 Operating Expenditure Indicators by Purpose			Divide base by		
D.1.1	**Water Management and Environment Expenditures per Capita**	**D32 / D44**	**1.47**	**1.61**	**1.75**
D.1.2	**Agriculture and Nutrition Expenditures per Capita**	**D33 / D44**			
D.1.3	**Transportation Expenditures per Capita**	**D34 / D44**			
D.1.4	**Trade Expenditures per Capita**	**D35 / D44**			
D.1.5	**Education Expenditures per Capita**	**D36 / D44**			
D.1.6	**Health Care Expenditures per Capita**	**D37 / D44**			
D.1.7	**Culture Expenditures per Capita**	**D38 / D44**			
D.1.8	**Internal Administration Expenditures per Capita**	**D39 / D44**			
D.1.9	**Labor and Social Affairs Expenditures per Capita**	**D40 / D44**			
D.1.10	**Local Economy Expenditures per Capita**	**D41 / D44**			
D.1.11	**Construction Expenditures per Capita**	**D42 / D44**			
D.1.12	**General Treasury Management Expenditures per Capita**	**D43 / D44**			
E. Revenue Per Capita Data					
E.1.3	**National Tax Revenues per Capita**	**D1 / D44**			
E.1.4	**State Operating Subsidies per Capita**	**D2 / D44**			
E.1.5	**Local Recurring Revenues per Capita**	**D3 / D44**			
E.1.2	**Recurring Revenues per Capita**	**D4 / D44**			
E.1.6	**Non-recurring Revenues per Capita**	**D5 / D44**			
E.1.7	**Proceeds from Asset Sales per Capita**	**D6 / D44**			
E.1.1	**Total Revenues per Capita**	**D7 / D44**			
E.1.8	**Original Recurring Revenues Budget per Capita**	**D8 / D44**			
E.1.9	**Original Budget per Capita**	**D9 / D44**			
F. Expenditure Per Capita Data					
F.1.1	**Operating Expenditures per Capita**	**D10 / D44**			
F.1.2	**Expenditures of Budgetary Organizations per**	**D11 / D44**			

	Capita				
F.1.3	**Operating Subsidies to Contributory Organizations per Capita**	**D12 / D44**			
F.1.4	**Operating Subsidies to State Firms per Capita**	**D13 / D44**			
F.1.5	**Capital Investments per Capita**	**D14 / D44**			
F.1.6	**Total Expenditures per Capita**	**D15 / D44**			
Indicator		**Base**	**1994**	**1995**	**1996**
			Divide Base By		
			1.47	1.61	1.75
F.1.7	Original Operating Budget per Capita	D16 / D44			
F.1.8	Original Investment Budget per Capita	D17 / D44			
F.1.9	Original Expenditure Budget per Capita	D18 / D44			
F.1.10	Overall Surplus per Capita	D19 / D44			
G. Liquidity Per Capita Indicators					
G.1.1	Total Assets per Capita	D20 / D44			
G.1.2	Short-term Assets per Capita	D21 / D44			
G.1.3	Cash & Short-term Financial Assets per Capita	D22 / D44			
G.1.4	Short-term Liabilities per Capita	D23 / D44			
G.1.5	Notes & Accounts Payable per Capita	D24 / D44			
H. Debt and Debt Service Per Capita Indicators					
H.1.1	Short-term Debt per Capita	D25 / D44			
H.1.2	Long-term Debt per Capita	D26 / D44			
H.1.3	Total Outstanding Debt per Capita	D27 / D44			
H.1.4	Total Annual Debt Service per Capita	D28 / D44			
H.1.5	Amortization of Debt (Principal Payments) per Capita	D29 / D44			

H.1.6	Interest Payments per Capita	D30 / D44
H.1.7	Operating Surplus before Debt Service per Capita	D31 / D44
H.1.8	Operating Surplus after Debt Service per Capita	(D4 - D10) / D44

STEP 4: CALCULATE POPULATION CATEGORIES AND ASSIGN UNIQUE IDENTIFIER

Each city should be given a unique identifier (number) as well as a population code from the categories in the following table. (The unique identifier will only be used in the case of clarifying questions with the data.)

Population Code	Number of Inhabitants in the City
1	1 to 500
2	501 to 1 000
3	1 001 to 2 000
4	2 001 to 5 000
5	5 001 to 10 000
6	10 001 to 20 000
7	20 001 to 50 000
8	50 001 to 100 000
9	100 001 and greater

ANNEX II

TABLE OF VALID VALUES

	A. Municipal Financial Characteristics	Valid Values	Valid Values for Analysis (if different)
A.1 Key Revenue Indicators			
a11	Recurring Revenues/Total Revenues	0 < a11 < 1	
a12	National Tax Revenues/Recurring Revenues	0 < a12 < 1	
a13	State Operating Subsidies/Recurring Revenues	0 < a13 < 1	
a14	Local Revenues/Recurring Revenues	0 < a14 < 1	
a15	Proceeds from Asset Sales/Total revenues	0 <= a15 < 1	
A.2 Key Expenditure Indicators			
a21	Total Expenditures Per Capita	a21 > 0	
a22	Operating Expenditures Per Capita	a22 > 0	
a23	Operating Expenditures/Total Expenditures	0 < a23 <= 1	
a24	Capital Investments/Total Expenditures	0 <= a24 < 1	
a25	Expenditures of Budgetary Orgs/Operating Expenditures	0 <= a25 <= 1	
a26	Subsidies to Contributory Orgs/Operating Expenditures	0 <= a26 <= 1	
a27	Subsidies to Other Orgs/Operating Expenditures	0 <= a27 <= 1	
B. Municipal Financial Performance			
B.1 Key Indicators of Net Results			
b11	Total Expenditures/Total Revenues	0 < b11 <= 1	
b12	Operating Expenditures/Recurring Revenues	0 < b12	
b13	Operating Surplus/National Tax Revenues		0 < b13
b14	Operating Surplus/State Operating Subsidies		0 < b14
B. 2 Key Actual to Original Budget Performance Indicators			
b21	Actual Revenues/Original Revenue Budget	0 < b21	
b22	Actual Recurring Revenues/Original Recurring Revenue Budget	0 < b22	
b23	Actual Expenditures/Original Expenditure Budget	0 < b23	
b24	Actual Operating Expenditures/Original Operating Budget	0 < b24	

b25	Actual Capital Investments/Original Investment Budget	0 <= b25	0 < b25
		Valid Values	**Valid Values for Analysis (If different)**
B.3. Key Relative Growth Indicators			
b31	Change Recurring Revenues/Change Total Revenues	0 < b31	
b32	Change Operating Expenditures/Change Recurring Revenues	0 < b32	
b33	Change Subsidies to Orgs/Change Operating Expenditures	0 <= b33	0 < b33
B.4 Key Liquidity Indicators			
b41	Notes & Accounts Payable/Recurring Revenues	0 >= b41	
b42	Short-Term Assets/Short-term Liabilities	0 >= b42	0 > b42
b43	Overall Surplus/Recurring Revenues	0 >= b43	0 > b43
C. Municipal Debt Position			
C.1 Key Indicators of Outstanding Debt			
c11	Long-Term Debt/Total Assets	0 <= c11	0 < c11
c12	Long-Term Debt/Population	0 <= c12	
C.2 Key Debt Service Indicators			
c21	Total Annual Debt Service/Recurring Revenues	0 <=c21	
c22	Interest Payments/Recurring Revenues	0 <= c22	
c23	Total Annual Debt Service/Operating Surplus Before Debt Service		0 < c23
c24	Total Annual Debt Service/Cash & Short-Term Financial Assets	0 <= c24	0 < c24

All per capita indicators (Sections D - H in “Preparation of the Data”) should have non-negative values. The only exception is Operating Surplus (Deficit) per capita.

ANNEXES

PART II